

# MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

VOL. XII. No. 12.  
WEEKLY.

BALTIMORE, OCTOBER 29, 1887.

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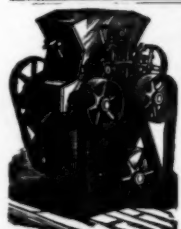
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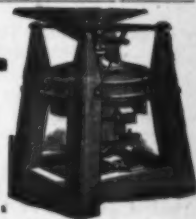
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## FACTS ABOUT THE NEW YORK AQUEDUCT TUNNEL.

When work began on the NEW CROTON AQUEDUCT, INGERSOLL "STRAIGHT LINE" AIR COMPRESSORS AND INGERSOLL DRILLS were adopted on about one-half the line. As the work progressed, the Engineer's Tables showed that the progress on the sections using INGERSOLL MACHINERY AVERAGED HIGHER THAN ALL OTHERS. This induced contractors on the other sections to put in INGERSOLL MACHINERY. Section "A," under Rodgers & Farrell, the first section north of Harlem River, was run for nearly a year with other machinery. In August, 1885, one-half the section was equipped with INGERSOLL DRILLS, which were so satisfactory that ALL OTHER DRILLS were thrown out, and the section was completed February 2d, 1887, WITH INGERSOLL DRILLS EXCLUSIVELY. During the ten months prior to completion, THE MONTHLY RECORDS AVERAGED 218 FEET, 83 FEET in one week, and 265 FEET, 6 INCHES MADE IN 26 DAYS, ALL FULL SECTION TUNNEL, 16x16 FEET. THIS IS THE BEST RECORD MADE IN FULL SECTION TUNNEL ON THE LINE. NATURE OF ROCK HARD GRANITE GNEISS.

INGERSOLL DRILLS HAVE COMPETED IN NO PRIZE COMPETITIONS ON THE AQUEDUCT. INGERSOLL Drills are now driving four-fifths of the aqueduct, and are used in the following shafts: Smith & Brown, Croton Dam Section, Ingersoll Drills and Air Compressors exclusively. Brown, Howard & Co., Shaft Zero to 11 B, Ingersoll Drills and Air Compressors exclusively (175 Drills, 19 Air Compressors). Shafts 12 A and 12 B, McLaughlin & Reilly, 14 Ingersoll Drills. Shaft 14, 3 Ingersoll Drills. Shaft 18, 5 Ingersoll Drills. Shaft 18 1/2, 2 Ingersoll Drills. Shaft 19, 6 Ingersoll Drills. Shafts 20 and 21, 9 Ingersoll Drills. Shafts 22 and 24 inclusive, Rodgers & Farrell, all Ingersoll Drills, 30 in number. Harlem River Section, Peterson & Co., Ingersoll Drills and Air Compressors exclusively. Shafts 27 and 32, 14 Ingersoll Drills and 1 Air Compressor. Terminal Gate-House at 135th Street, Ingersoll Drills exclusively. SEND FOR DESCRIPTION OF AQUEDUCT WITH ENGINEERS' TABLES OF PROGRESS AND CATALOGUE.

INGERSOLL ROCK DRILL CO., 10 Park Place, New York City.



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# THE Hercules Water Wheel IN THE SOUTH.

## WHAT SOUTHERN USERS SAY OF THE HERCULES.

There is probably no higher authority in the South on water wheels than Mr. John Hill, civil and mechanical engineer, of the great Eagle & Phenix Cotton Mills, at Columbus, Ga. Read what he says of the Hercules Wheel.

### The Best Wheel We Have.

JOHN HILL, CIVIL AND MECHANICAL ENGINEER,  
Reference—Eagle & Phenix Mfg. Co.

COLUMBUS, GA., April 30, 1887.

As to my opinion of the Hercules Wheel, will say: In our mill (the Eagle & Phenix) we have twenty-one (21) water wheels of various kinds, three of them being Hercules. I regard the Hercules as being by far the best wheel of any we have. It is the best in workmanship, absence from repairs, large per cent. in power, and in general satisfactory results. I know of no wheel its equal. At Holyoke, testing flume a few weeks since, I personally witnessed a test of a Hercules of the ordinary construction, which gave 83 96-100 per cent. of efficiency.

Yours truly,

JOHN HILL.

### Cannot Speak too Highly of the Hercules Wheel.

JAMES RIDDLE, SON & CO.  
Brandywine Cotton Mills.

KENTMERE, DEL., April 27, 1887.

In reply to your inquiry as to the working of a "Hercules Water Wheel" now running at our mills, would say that we put in nearly two years ago a 39-inch Hercules Wheel, running under a 14-foot head. It is driving up to full regular speed three hundred and three heavy looms, with only half gate. We are about to enlarge the weave mill and add three hundred more looms, which will be driven by the same wheel. We cannot speak too highly of the Hercules. It has absolutely run without cost or derangement since it started, and has given eminent satisfaction in every way.

Yours truly,

JAMES RIDDLE, SON & CO.

### Perfectly Satisfactory in Every Way.

PORTER WOOLEN MILL.

J. H. Porter, President. J. W. Robertson, Gen. Manager.

CLARKSVILLE, GA., April 29, 1887.

In reply to enquiry as to my opinion of the Hercules Turbine Water Wheel, say: I have put in two, one about

six years since, and the other in 1883, and think so highly of the wheel that I shall use another in cotton mill this company is now constructing. Neither of the wheels alluded to have given the slightest trouble, and their working has been perfectly satisfactory in every way.

Yours truly,

J. W. ROBERTSON, Gen. Man.

### The Hercules Wheels Have Given Perfect Satisfaction.

ROSSELL MANUFACTURING CO.

Sheetings, Shirtings, Checks, Yarns, &c.

ROSWELL, COBB COUNTY, GA., April 29, 1887.

In answer to yours of 25th inst., asking our opinion of the Hercules Wheel, will say our experience is as follows: In our new mill, built about four (4) years ago, we put a 30-inch Hercules Wheel, under a 21-foot head of water. It has given such satisfaction running this (5,000) five thousand spindle mill, that last summer, when we were compelled to put in a new wheel at our old mill, running 7,000 spindles, looms, twistings, &c., we put in a 36-inch Hercules Wheel, under a 27-foot head of water. All I can say is we have surplus power in both mills, have lost no time by any defect of wheels, and if we were putting up any more mills, would use the Hercules Wheel. They have given us perfect satisfaction.

Yours respectfully,

F. J. MINHINETT, Prest.

### A Good Wheel, and Has Given Good Satisfaction.

PEE DEE MANUFACTURING CO.

Plaids and Warps.

ROCKINGHAM, N. C., April 30, 1887.

We have been using the Hercules Water Wheel for more than six years. Our superintendent says it is a good wheel, has given good satisfaction, and its performance is equal to the claims of the maker. We have a head of 17 feet. Our wheel has a diameter of 39 inches. Under this water pressure the wheel has moved 4,000 spindles and the needed preparation, and 164 plaid looms. The above includes the dye house, machine shop and all other machinery which we employ.

Very respectfully,

WALTER L. STEELE, Prest.

### Best Wheels I Have Ever Seen.

MARIETTA PAPER MANUFACTURING CO.,

Book, News and Wrapping Papers.

MARIETTA, GA., April 30, 1887.

In reply to your favor of the 25th inst.: I am using four Hercules Water Wheels, two 12-inch, one 24-inch,

and one 30-inch. They have given me perfect satisfaction, and I think that they are the best wheels that I have ever seen.

Yours truly,

S. A. ANDERSON.

### Has Never Given the Slightest Trouble.

PACOLET MANUFACTURING CO.

Jno. H. Montgomery, Prest. and Treas.

PACOLET, S. C., April 29, 1887.

Replying to yours of 25th, would say: We have a 54-inch Hercules Water Wheel running, under 20-foot head, 12,000 spindles and 328 looms, with other necessary machinery. Has been running about three and a-half years, and has never given us the slightest trouble; not an hour's stoppage during the whole time.

Very truly yours,

JNO. H. MONTGOMERY, Pres. and Treas.

### Well Satisfied With It.

WM. J. RUSSELL,

Manager Princeton Factory.

ATHENS, GA., April 28, 1887.

I have used the "Hercules" wheel since 1881, and am so well satisfied with it that I should not purchase any other if in want of a first-class wheel. It does all the manufacturers claim for it.

Yours truly,

WM. J. RUSSELL, Manager.

### Has Given Entire Satisfaction.

HOLCUMB'S ROCK, BEDFORD CO., VA., }

April 28, 1887.

The Hercules Wheel has given entire satisfaction.

Very respectfully,

J. A. HARRIS & CO.

### Unhesitatingly Say its the BOSS Wheel.

BUZELA, GA., April 29, 1887.

I have been using a 21-inch "Hercules Water Wheel" since August 1880, and unhesitatingly say it is the BOSS wheel. It has performed with utmost satisfaction, and given more power than the makers claim, using water with more economy than any wheel I ever knew. T. W. G. Inglett, Esq., who has put up two "Hercules" for parties, says "it can't be beat."

Very respectfully,

BRAD. MERRY.

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**Gives the Most Power for its Size and the Highest Average Percentage from Full to One-Half Gate of Any Wheel Ever Made.**

*If you want to buy a new Water Wheel, if your old wheel does not give satisfaction, if you would like to know just how perfect a Water Wheel can be made, or if you are in any way interested in Water Wheels it will pay you to write for Catalogue No. 3 to the*

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C. P. HAUGHIAN, V. Pres.

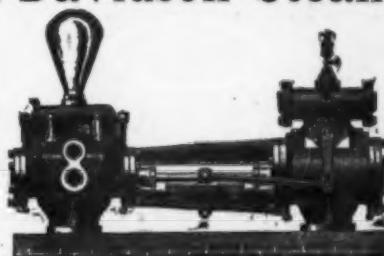
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Reliable,  
FOR ALL  
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WHETHER  
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ALSO  
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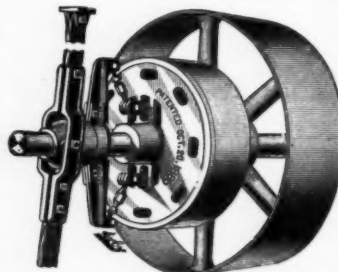
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A Perfect Friction Clutch,  
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Has largest friction surface and most perfect toggle and levers. Can be attached to Pulleys, Gears, Sprocket Wheels, or used for Shaft Couplings. 30 sizes, from 5 to 1,000 horse power. Will run at any speed, and is specially designed for running Electric Dynamos.

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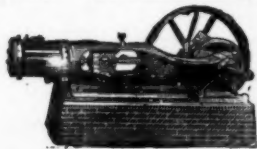
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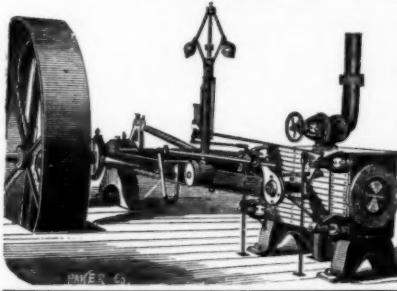
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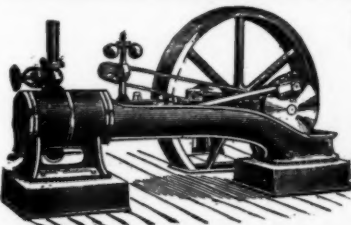
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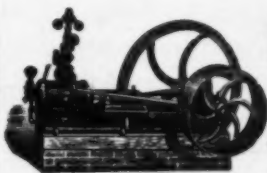
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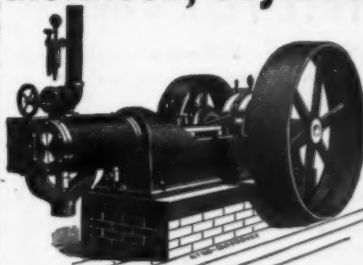
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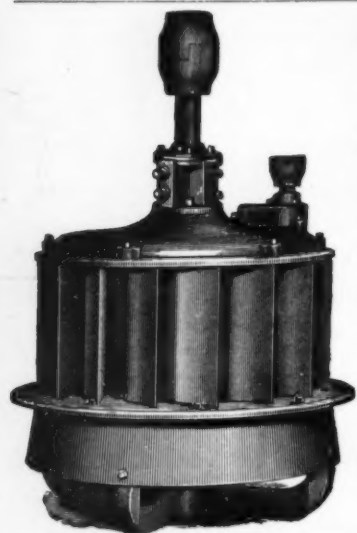
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Eagle & Phenix Mfg. Company, Columbus, Ga.  
Anniston Mfg. Co., Anniston Ala.  
J. P. King Mfg. Co., Augusta, Ga.  
Rose Mining Co., Charleston, S. C.  
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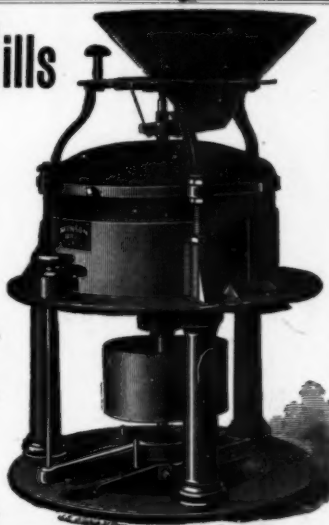
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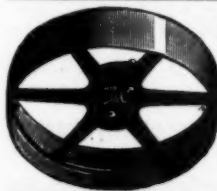
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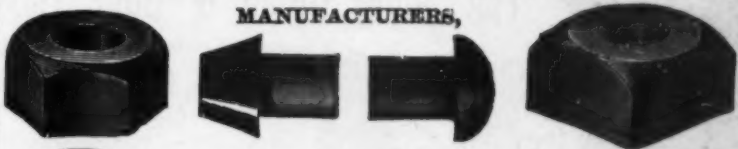
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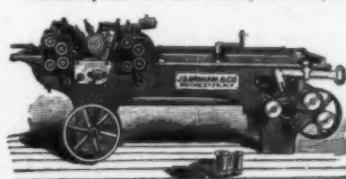
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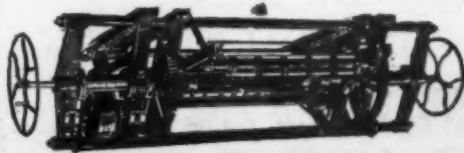
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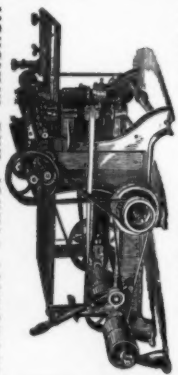
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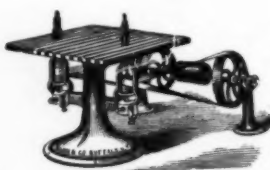
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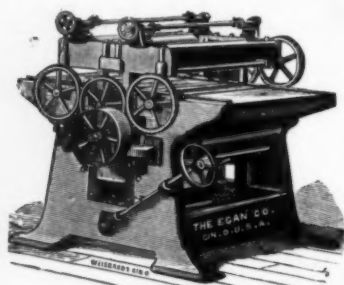
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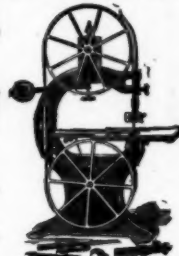
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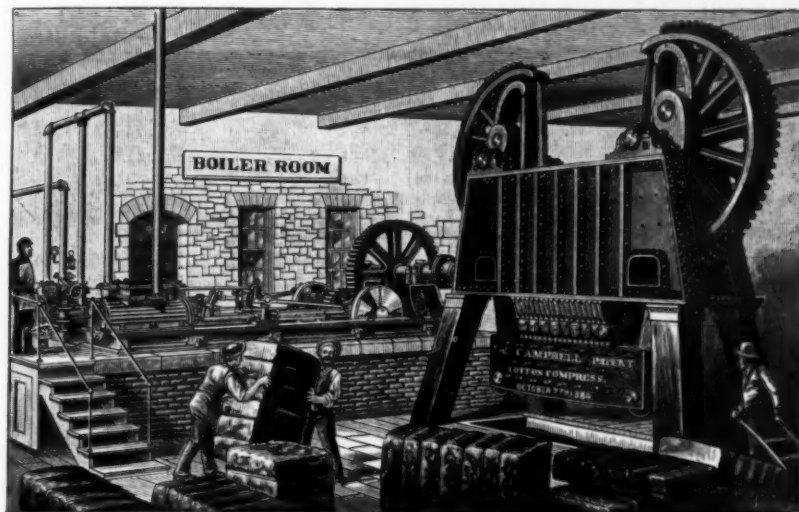
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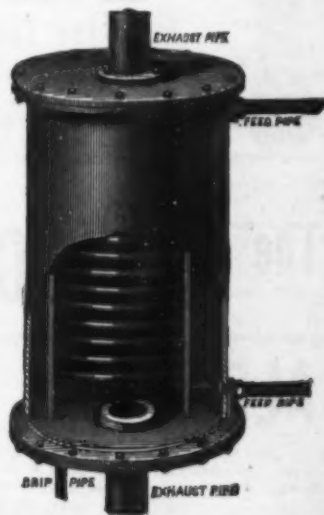
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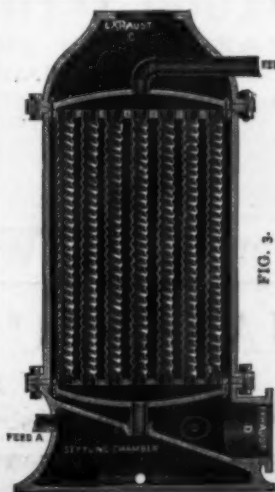
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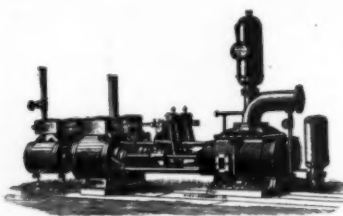
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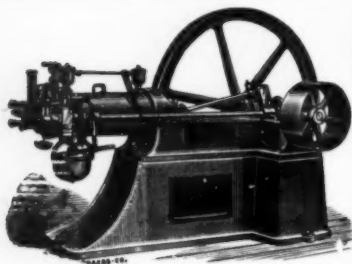
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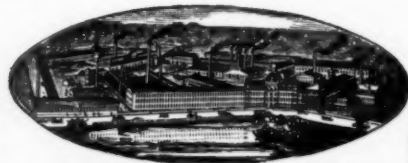
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# Manufacturers' Record.

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## Protection Woman's Safeguard.

In no country on the face of the earth is woman held in as high regard as in the United States. In none is she so entirely a free agent, or the recipient of such tender and chivalric attention. Foreigners notice this with wonder; they cannot understand it. The humblest self-respecting woman is environed by a public opinion that is her shield and her safeguard. The series of ovations to Mrs. Cleveland that have attended every stage of the President's recent journey, were not merely in honor of her as "the first lady of the land," but had a higher significance. They expressed the profound conviction of the American people that the family is the unit of the republic, and that its continued progress and prosperity must, under God, depend in large measure upon the purity, refinement and womanly dignity of its mothers, wives and sisters. The beautiful wife of the President was for the moment the type of American womanhood. Whatever tends to exalt women, to enlarge their opportunities for usefulness and for the exercise of their natural gifts or acquired skill, helps by so much to sustain and increase their influence, while whatever tends to abase or degrade them reduces their power for good, and in equal ratio impairs the moral standard of the nation. There can be no dissent from these self-evident propositions. They are immutable truths. Where then is the need of repeating them in the MANUFACTURERS' RECORD?

There is need to consider them, however, for were our free-trade advocates to have their way, there would be brought upon the country conditions so entirely at variance with those now existing, that every family would sooner or later experience the baleful results. To know what would eventually befall the land we have only to study the condition of woman in those countries where the wages of the men are not enough "to keep the wolf from the door." This is so graphically described by Mr. Robert P. Porter in his *Free Trade Folly* that we quote his testimony entire. Mr. Porter says:

In Europe the degradation of woman is complete. I have seen her around the pit mouth, at the forge, and barefooted in the

brick-yards of "Merrie England;" filling blast furnaces and tending coke ovens in "Sunny France." I have sadly watched her bearing the heat and burden of the day in the fields of the "Fatherland," and in Austria-Hungary doing the work of man and beast on the farm and in the mine. I have seen women emerge from the coal pits of "busy Belgium," where little girls and young women graduate underground as hewers of coal and drawers of carts, for it is no uncommon thing in Europe to hitch women and dogs together that manufacturing may be done cheaply. Aged, bent and sunburned, I have seen woman, with rope over shoulder, toiling on the banks of canals and dykes in picturesque Holland. Having witnessed all this, I was yet surprised to find in a city so beautiful and seemingly so rich and prosperous as Stockholm, in Sweden, women still more debased. In Stockholm she is almost exclusively employed as hodcarrier and bricklayer's assistant. She carries bricks, mixes mortar, and in short does all the heavy work about the building. At the dinner hour you see groups of women sitting on the piles of wood and stone eating their frugal repast. They wear a short gown, coming a trifle below the knees, their home-knitted woolen stockings and wooden shoes. Over their heads a kerchief is tightly tied. Those engaged mixing mortar and tending plasterers wear aprons. They are paid for a day of hard work of this toil, lasting twelve hours, the munificent sum of one kronor (equivalent to 26.8 cents). Women sweep the streets, haul the rubbish, drag hand-carts up the hills and over the cobblestones, unload bricks at the quays, attend to the parks, do the gardening and row the numerous ferries which abound at Stockholm. The entire dairy business of the city is in their hands, and here they take the place of horses and dogs, carrying on their shoulders the heavy cans of milk from door to door.

On another page he quotes the following statistics:

The census of free-trade England shows that 65,000 women are engaged in coal-mining, clay-working and the manufacture of iron and steel. Of the 6,373,367 persons returned in 1881 as engaged in industrial pursuits in England and Wales, 1,578,189 were women. Of the 3,837,112 so returned in the United States only 631,988 were women. Of this number the manufacture of tobacco, boots and shoes, clothing, woolen and worsted, cotton and silk goods, hosiery, millinery, carpets, fancy boxes, hats and caps, printing, bookbinding, and canning fruit employ about 460,000, and the miscellaneous industries the remainder. But few are engaged in out-door manual labor. At present we are not obliged to graduate our girls and our future mothers as fillers of blast furnaces and makers of brick. The competition with the laborers of Europe has not yet compelled our women to work at the anvil and the smithy fire. The labor of women in the United States has not yet been degraded, because men who bow down and worship the god of cheapness demand it; so long as the labor of our country is protected, so long and no longer will the head of the family be able to earn enough money to support his wife and children.

We can add nothing to these pictures of woman's abasement. They are true, the more the pity, and in them is a solemn warning to prospering America. If we would maintain the high standard of American womanhood; if we would add to the comfort and beauty of domestic life; if we would be surrounded by that delightful atmosphere of refinement that makes even the humbler homes of our land charming, we must see to it that the wall of protection is never thrown down, but that it stands forever an impregnable barrier between European and American labor.

## The Argument of Figures.

An exceedingly suggestive table of statistics accompanied as a supplement the Tariff League Bulletin for September. It was compiled for the American Almanac from government official reports for the fiscal year ending June 30, 1886, and gives the quantities, values, rates of duty and total duties collected on imports entered for consumption during that period. To all students of figures who will examine these statistics without prejudice, they will be a better argument for maintaining the protective idea in our tariff laws than volumes of speeches or essays. In that year the total expenditures of the government were \$242,483,139, and the surplus applicable to extraordinary expenses and extinguishment of the public debt was \$93,956,587. One of the heavy items of expense, interest on the public debt, amounting to \$50,580,146, has in the last fifteen months been materially reduced by the purchase of outstanding securities, and it will never again be as large by a third as it then was. The receipts from internal revenue that year were \$22,849,349 in excess of the surplus, while in the gross outlay for civil and miscellaneous purposes was included the cost (\$4,000,000) of maintaining the bureau, and a considerable sum for the cost of arrest, trial and punishment of offenders against the revenue laws. It is perfectly plain therefore that this bureau can be dispensed with hereafter, and that the country can be relieved of a swarm of officials who are no longer necessary, while the system which they represent is and always has been opposed to the spirit of the national constitution and obnoxious to the American people.

There are other important truths concealed in these tabulated statistics. Of these the Bulletin says: "It is interesting to note that raw materials, which it is alleged the administration proposes to put on the free list in order to reduce the revenue, are chiefly agricultural. They comprise imports of over \$40,000,000 of agricultural products in one year, on which duties were collected amounting to less than \$13,500,000. The remaining raw material consists chiefly of iron and copper ore and bituminous coal, in all amounting to about \$4,000,000 in value, and paying duties amounting to about \$1,200,000. \* \* \* If, in spite of an average duty of 30 per cent., over \$40,000,000 worth of agricultural products (at foreign valuation) are annually imported, it is not difficult to imagine the effect upon our farming industries of making these materials free."

The duties from crude manufactures imported for use as materials for more advanced products are shown to have been \$7,757,123, or 27½ per cent. of the foreign valuation of the entire importation. "If these should be put on the free list, as has been proposed," says the Bulletin, "the

total amount of reduction of the revenue would not exceed \$23,000,000, which is about three-fourths of the internal revenue derived from the tax on tobacco. It may be doubted, upon an investigation of the facts exhibited in these schedules, if Congress will consent to sacrifice or imperil the agricultural and manufacturing interests of the country by placing them in free competition with the labor of foreign nations, in order to secure such a comparatively insignificant reduction of the revenue."

## A Whiff of Hartshorn.

The Puritan foremothers went to meeting every Sabbath carrying sprigs of fennel and caraway to rouse them from their tendency to sleepiness when the prosy old doctrinaire in the pulpit began on his "teenthlies." In later times of less simplicity their fair descendants, borrowing the fashion from the daughters of the more phlegmatic Knickerbockers, took small bottles of salvolatile to their sanctuaries for the same purpose, and, while the parson droned through his customary assault upon the sins of the Hittites, Perizzites and Jebusites, they kept themselves from "nid-nid-nodding" by frequent whiffs of hartshorn. And so it has come to pass that every lady who wishes to escape the charge of being a victim of lethargy in a religious assembly makes sure, before she leaves her home, that she has on her person her little bottle of "keep awake." Fair women now call them vinaigrettes or by other fanciful names, but the waking power within their crystals is that same old-fashioned salt that the grandmothers used.

There are in these United States numerous men who are dull and sleepy on many questions of national import that affect their own welfare, and in no part of the country are they more numerous or more lethargic than in the purely agricultural districts of the South and West. While to a certain extent this is true of all that Piedmont region, whose magnificent resources have just been illustrated at Atlanta, it is especially so in those other sections where king cotton is supreme on the plantations, and retains his hold upon his subjects by keeping them in a state of semi-sleepiness from year's end to year's end. What can be done to arouse all these people who have listened from infancy until now to the stupifying, sleep-inciting doctrines taught by free trade speakers and writers? The MANUFACTURERS' RECORD prescribes for all such repeated whiffs of Hartshorn, not from a cut-glass bottle, but from a little pamphlet called the *Industrial Miscellany*, recently published by Mr. E. A. Hartshorn, a voluminous and always instructive contributor to the protection literature of this country, and the author of "Wages, Living and Tariff." This little brochure has on its title page



this motto: "No substantial advancement in civilization has ever been made where protective principles have been ignored." On the outside, on the last page, is this trite sentence by the author, which is worthy to be classed with the still quoted proverbs of Poor Richard's Almanac: "Nothing is cheap when we have nothing with which to purchase." Enclosed between these telling sentences are 54 pithy but exceedingly stimulating chapters, treating of a great number of themes more or less closely connected with the central idea of protection to American industries. Every one of these is as pungent and arousing to the lethargic thinker as is a bottle of smelling salts to a drowsy worshipper. They are also overflowing with a quiet humor that adds to the interest and potency of the main argument. Our author's short chapters are remarkable for their solid common sense. No long arguments or fine-spun theories for him. He gets to the nub of the matter at once, and illuminates it by a question or a joke. Here is a specimen. Replying to those who claim that cheap labor is a blessing, he asks: "Why, if cheap labor is the all-important element of national thrift, would it not be a capital idea to drive our sheep to China to be sheared, our cows to Central Africa to be milked and our horses to England to be shod?"

Perhaps one of the most instructive chapters is that which tells of the effect of British rule in India. We quote it entire as follows:

When the English went to India it was the foremost manufacturing country in the world. It was to buy the delicate manufactures of cotton that Europeans set up their trading stations along its coasts. Those manufactures had been famous from the time of the Roman Empire.

The finest were so delicate that the Roman poets called them "woven wind."

A lady's dress made of this fabric could be drawn through her finger-ring. Decca alone had 30,000 looms at work in the bounds of a single city. In some parts of the country every man, woman and child were employed in some stage of the manufacture.

But England's industrial policy has cruelly changed India to a mere "food" and "raw material" producing country, and while a manufacturing country always has products which it can sell in times of scarcity to buy food, a mere food-producing country has nothing in times of famine. Therefore twenty years of free trade (?) accomplished the work of destroying Hindoo industry.

Decca became a ruin; great marts of trade on the coast were destroyed; the price of agricultural produce fell to a ruinous cheapness, because nearly everybody was producing food. The poor Indian weavers were reduced to absolute starvation, because of their inability to compete with the production of the power-loom of England.

One standard British authority says 37,000,000 human beings have died of starvation in India since Queen Victoria came to the throne; while Miss Nightingale, who knows India from personal observation during the last great famine, expresses the opinion that fully this number starved to death in that single year of her labor in India.

There are some frozen truths in the foregoing that no free-trade advocate has ever attempted to explain.

In the words of one of them, when speaking of another matter, "if these things are true, so much the worse for the facts."

Not the least entertaining and suggestive feature of this book is its wood cuts. One of these illustrates the position of those who oppose "hot house industries," preferring natural development, by a picture of a forlorn old Indian squatting beside a wood fire he is feeding. Another called "too much free raw material" depicts a sea sick passenger in the act of paying tribute to Neptune. Take it from first to last, this series of short, witty and very-much-to-the-purpose essays is a valuable addition to the list of instructive works that the American Protective League recommends for general distribution. No opponent of protection, however wily he may be, can successfully combat any of this author's propositions. We hope the pamphlet will go in all directions, and be widely read. It will certainly act as a whiff of harts-horn whenever it falls into the hands of those who have been lulled into sensuous repose by the smooth speeches and erudite editorials they have read. It is a capital work and ought to meet with a large sale.

We have from time to time called the attention of our readers to the resources and advantages of the thriving young city, Tuskalooosa, Ala. In connection with the remarkable display made by this town at the Piedmont Exposition just closed at Atlanta, we clip the following from the Constitution of the 12th inst.

Tuskalooosa, Ala., has done herself proud. The display made by this phenomenal young town is simply wonderful. Mr. Robert Jones, a courteous and vigilant gentleman, assisted by Mrs. Anderson, an intelligent and pleasant lady, preside over this department. There is no better collective exhibit in the exposition, and there is not one which is arranged in more attractive shape.

The coal exhibit of Tuskalooosa is surprising. Two solid blocks, from 5-feet seams, weigh over two tons each. The State geologist says the "famous Pratt vein, which is Birmingham's coke source, actually underlies Tuskalooosa," and that "the coal measures of Tuskalooosa county are believed to be thicker than any field in the known world. There are, in these measures, some 53 seams of coal, which have an aggregate thickness of about 125 feet pure coal, of which 25 seams are of workable thickness, 9 seams having over four feet of coal, and 3 having more than six feet of coal." J. Blodgett Britton, the Pennsylvania authority, in his analysis, gives 80% per cent. of fixed carbon to the coke made from this coal, of which there is over a ton on exhibition. The other minerals in the Tuskalooosa exhibit are almost as surprising. Red and brown hematite, brown and manganiferous, or spiegel ores, sulphate of iron, limestone, yellow ochre, paint rock, glass, building and moulding sand, fire-clay, potters' and brick clay, being included in the exhibit; thirty-one merchantable woods and splendid specimens of agricultural products are among the features of the Tuskalooosa collection.

Tuskalooosa is the only Alabama town having direct all-water transportation to the sea.

The agricultural display is excellent, embracing several kinds of corn, five or six varieties of sweet and Irish potatoes, and many grasses, herbs, etc. A notable feature is the tobacco. There are four or five different grades of manufacturers' cigars, some of which are said to be very fine. There are also many useful and pretty articles manufactured by machinery and hand.

### The Boston Convention.

The convention of the North Atlantic department of the American Shipping and Industrial League at Boston last Friday and Saturday was largely attended by representatives of commercial trade and manufacturing bodies, and by prominent farmers and fruit cultivators. All reports agree that it was an assemblage of earnest men who knew the needs of the country, and were determined to have them understood by the people and their representatives in Congress. The addresses delivered were all of unusual excellence, and remarkable for their unity of sentiment and for the directness of purpose they evinced.

The welcome in behalf of the city by Mayor O'Brien was brief, graceful and pertinent. In one sentence he brought the situation before the convention, saying: "If I addressed you a generation ago, if I had gone back 30 years, I should have been able to point to the most prosperous industry, in which there was more business enterprise developed than in any other business interest in the country. I can only say that you represent a neglected interest, an interest that needs revival." The contrast between the glorious past of the American merchant marine and its present forlorn condition, and the corresponding decadence of this country as a naval power, were strongly presented by several speakers, and especially by Hon. R. S. Spofford, who presided; by Senator Fry, of Maine, and by Hon. N. D. Sperry, of Connecticut, delegate from the New Haven Chamber of Commerce. The latter said:

The total ship tonnage of the United States, June 30th, 1858, was five million tons and upwards; registered for foreign trade 2,500,000; enrolled and licensed 2,502,000; steam navigation 729,390; increase for the year 108,965 tons. In 1860 the tonnage of the United States was 5,353,868. In the same year there were built ships carrying 212,892 tons. Since that date, 1860, American shipping has declined. In 1866 there was but one vessel building or in course of construction in New York city, and only two in Boston. Before the war the stars and stripes led the carrying trade of the world, and the American ships had the preference for trade, care and speed, and this gave them the advantage on every ocean. The tonnage of Great Britain in 1861 was 4,806,826 tons; United States 5,539,813 tons. During the five years ending with 1861 the carrying trade of New York was 1 billion, 644 millions of dollars, of which 1 billion was carried under the American flag, leaving but little more than half a billion for all the other nations. The advent of the war, and with it English cruisers, turned the tide against us. Thus in the four years which followed, out of 1 billion, 700 million dollars of foreign trade for New York city, less than \$400,000,000 was under the stars and stripes, while over 1 billion, 300 millions was carried under other flags.

These statements are humiliating to all true Americans. The war was England's advantage. Change from sail to steam and the building of iron ships worked against us also. The policy of Great Britain was not only to break down our shipping by putting on privateers, but to grant subsidies or bounties large in amount. Other countries followed, giving bounties or granting subsidies. As yet we have no system, and it is time we

had. We are giving to commerce, both in exports and imports, more than any other nation. When it was shown the Emperor of Brazil that the great trade between his country and our own was most of it by the way of England, he offered to give \$125,000 annually for a ship line direct to Brazil if our government would do the same. John Roach, one of our most enterprising ship-builders, went so far as to build the ships, not even thinking but what our government would make the appropriation required. But, to our shame and disgrace, the amount was refused. Yet Congress appropriates money to build navies to defend commerce. If we should expend out of our large and much-talked-of surplus something for the benefit of our merchant marine service the right thing would be done. If we could spend even a small portion of the surplus for our merchant marine the people would reap a large harvest, and the vexed question of surplus would be settled in a measure at least. Free ships, as talked of by some, would, as we are situated, complete our discomfiture, and ship-building would be unheard of in this country. England to-day pays about \$9,000,000 a year in subsidies or bounties, and in the last forty years she has paid over \$200,000,000 in subsidies to her merchant ships. Always on the alert to extend commerce, England pays \$800,000 per annum as a subsidy, pure and simple, to the new line which plies between Vancouver and Yokohama, and seeks to take from America the great Pacific trade. Is there any wonder that England's foreign trade amounts to 6,000,000 tonnage, while that of the United States barely reaches 800,000. England, France, Germany, Spain, Italy, Chili, the Argentine Republic, all pay in some form or another to help their commerce, while in the United States, every time the subject is presented to the attention of Congress, aid is denied. Forbearance may cease by and by. I must change one statement I made about Congress voting aid to commerce. It did vote \$400,000; but our administrators, rather than encourage our own ships, preferred foreign "tramps." Talk about the decline of commerce, is there any reason why it should not decline when money voted for our own use goes to foreign companies? We talk about commercial treaties with foreign governments. The first thing to do is something for the shipping interest of this country; then we may have ships to trade in should such treaties be adopted.

Hear what the London Gazette says about us, the organ of the Lloyds:

"One of the most prominent questions at the present time in the United States is how shall the national mercantile marine be revived? In the palmy days of American shipping their fine clippers were to be found spreading their white wings in all parts of the ocean; now it is becoming a rare thing to meet in the world's highways a vessel flying the American flag, and of those which are afloat it is still more exceptional to find one of American build.

Americans are now greatly exercised on the subject, and numerous proposals and suggestions are being made in the public prints and elsewhere for resuscitating the American marine. The British shipping community are certainly interested in this matter, for the obvious reason that the bulk of the carrying trade of American produce and manufactures is in the hands of British ship-owners. It is important, therefore, that we should have an intelligent apprehension of what is going on, in order that we may be ready to take an effectively defensive part in the competition, if such competition at any time be established.

It is somewhat fortunate for our interests that on the other side of the Atlantic opinion is divided as to the best means of remedying matters. One party is hot and strong for bounty and subsidy. In the last Congress this party presented a bounty bill, providing that every American vessel, sail and steam, trading with foreign ports, shall be



allowed 30 cents per ton for each 1,000 miles sailed or steamed, for a period of 20 years.' It will be recognized that this is not a very formidable form of opposition, for it is not in the least degree probable that the American taxpayers will consent to tax themselves to such an extent, and for so long a period, in order to develop or encourage one special branch of trade. He may be sure it will be many a long year before America again has a large fleet of merchant ships or carries on ship-building to any extent in her ports, but none the less it is incumbent on us to 'keep our weather eye lifting' and to shape our course according to the indications which may from time to time reach us from across the Atlantic."

This is all right from a British point of view. While our English brothers are keeping a "weather eye" upon us, let us do our whole duty towards our own commerce.

Mr. Sperry advocated the passage of the thirty-cent tonnage bill, as did all the other speakers, and closed with an earnest and patriotic appeal for the restoration of the American flag to leadership on the high seas.

This convention has forcibly pressed upon public attention certain fundamental truths. First, it is not the ship-builders that call for assistance or that need it, for the real competition is in the sailing instead of the building. Free ships are, therefore, no remedy for restoring our merchant marine. Secondly, our maritime interests have not fallen off because of protection, but for the want of it. The Boston Journal says truly: "Our ships have been competing unaided in open markets with the subsidized fleets of foreign nations, and the fact that though our builders and seamen are unequaled, the industry has almost perished, while our general prosperity has been stupendous, is an overwhelming vindication of the wisdom of the tariff. The time has come for our ships to have the same protection which has built our factories." This is the reason upon which rests the demand for the passage of the tonnage bill. That it will encounter a bitter opposition in Congress is to be expected, for the London Gazette, in the article quoted by Mr. Sperry, has given us fair warning. John Bull will keep his "weather eye lifting" and "shape his course according to the indications that may from time to time reach him across the Atlantic." We all know what that means. "The third house" will be filled with assistant congressmen," paid from his ample purse to prevent the passage of any measure to restore our merchant marine.

Before adjourning the convention appointed a committee from seven States to call upon President Cleveland, present to him the resolutions embodying its views, and to solicit his co-operation. This was a wise measure and one that ought to yield large favorable results. Next let the Gulf States speak through their representatives at Birmingham.

THE communication on the Internal Revenue System, published elsewhere, presents an interesting and forcible reply to some of the views advanced by another correspondent whose letter on the Treasury Surplus was published a few weeks ago.

## THE PIEDMONT EXPOSITION.

### A GRAND SUCCESS.

**The Wealth, Resources, Prosperity and Development of the South Handsomely Exhibited.**

**Half a Million People Visit the Great Exposition.**

[Special correspondence MANUFACTURERS' RECORD.]

OFFICE MANUFACTURERS' RECORD,  
EXPOSITION BUILDING,  
ATLANTA, GA., Oct. 30th, 1887.

The Piedmont belt section of the ever-growing South, the pregnant and fruitful land to which the people of the coming ages will turn their steps for homes, has planted another guide post to stand out as a veritable land-mark to note another era of Southern progress and development.

The many thousands who have come with love and pride in their hearts to witness what has been accomplished at home by patience and industry on a new line of industrial skill, have returned home with a certain degree of mental satisfaction that could not possibly have been obtained either by reading or by conjecture. The products of the land under a new regime, the manufactured articles of Southern manipulation, inventive skill and genius displayed in many and varied forms of productive usefulness, told the story of what the South has done in the past, and what the South intends to do in the future.

Grandly sublime this productive skill of our Southern country, which means self-preservation and self-protection; the utilizing of the smaller things which have been allowed to go to waste from sheer indifference,—and these are the coming elements of our prosperity, which is but the forerunner of the greatest and grandest industrial development of the 19th century.

Worthily has the South from the far-famed locality of the Piedmont belt asserted itself at this exhibition, which gave an inkling what is being accomplished by heroic men and lovely women of the Southland in the practical issues of life. Indeed, the transition from the old methods of thought and action to the serviceable and skilled processes of to-day has been happily exemplified in no uncertain manner and with a permanency as enduring as the foot-hills of the everlasting Piedmont section itself. Wonderfully heroic this self-assertion of our people over events where the mantle of forgetfulness has fallen, and where the lights and shadows of progress and prosperity steal gently through.

Doubly blessed this Southland which has arisen phoenix-like from disaster to a position grand and exalted among the nations of the earth, and in whose history there is much to extol, remember and perpetuate.

Gracious was the privilege granted us whereby we have for the first time in many years welcomed a Democratic president in our midst that he might realize as the representative head of this country the true status of our prosperity and advancement. These have been some of the fruits and advantages of the Piedmont Exposition wherein all alike have rejoiced and been made glad.

The exhibits were worthy the consideration of the large crowds that came hundreds of miles in order to participate in the industrial event, and the exhibitors deserve much praise for the manner in which matters and materials were adjusted for the exhibition. Indeed, too much praise cannot be given to those exhibitors who came from far and near and made preparation for the exhibition, but little commendation can be given to the management who for the most part seemed to have lost their heads in the immensity of the crowds and in the attempt to direct the passage of the people to and from the exhibition. In fact the crowds were too large for Atlanta to handle properly and with any degree of comfort, convenience or ease.

The mineral display was the best that has been exhibited in the South for many years, and was highly praised, both for its variety and its richness.

The machinery exhibit surpassed anything of its kind, and enjoyed the distinction of being the most thorough in its details of any at the exhibition.

Among the States represented, North Carolina held her own against all odds, and the sinews of her material wealth were amply defined in great magnitude and in undeniable strength.

The products from the Nanteralee Valley, in Western North Carolina, as exhibited from the Jarrett property, containing over 7,000 acres, showing its wonderful and varied mineral, marble, slate, talc and timber resources, were exceedingly gratifying and drew forth much surprise and comment.

The magnificent display of the 54 varieties of minerals and gems by the Marion Bullion & Manufacturing Co., in charge of General Manager Henry C. Demming, was the finest and most striking display of the whole exposition. Here in a handsome case were the diamond (one-half degree harder than the African diamond), ruby, sapphire, emerald, hyacinth, zircon, a beautiful light pigeon blood-stone (twice as valuable as the diamond), the garnet, opal, aqua marine, topaz, carbuncles, moonstones and other gems, all from Western North Carolina, and in most part from McDowell county. This exhibit, contained in a small show case, represented \$50,000.

The marbles and woods of Western North Carolina, owing to their variety and most excellent quality, attracted universal attention; in fact, the old North State seemed to have capped the climax in the excellent and general display of her minerals where old Rowan county held her own in the most auspicious and creditable manner.

The Marietta & North Georgia exhibit, which was under the able management of William Beal, of Murphy, Cherokee county, N. C., attracted great attention. This display consisted of a great variety of minerals, marbles and timber, which lie in great profusion along the railway, passing through a country rich in nearly all the resources known to man.

The State of Alabama made a notable showing, superior in many respects to most of the other exhibits. In systematic arrangement it could not be surpassed by any.

Anniston, Gadsden, Sheffield and Tuscaloosa, the iron manufacturing centers of the South, made striking and prominent displays which were visited by tens of thousands in quest of information relative to the great iron-producing sections of the South.

Georgia paraded herself in a manner that reflected credit upon her as one of the most progressive and prosperous of all the Commonwealths, and her displays from all sources were par excellence and presented in the best possible manner. The exhibit of Floyd county was conspicuous for the variety of agricultural products and in the display of the farm productions. It was by all odds the best exhibit at the exposition. Georgia may well feel proud of her exhibit.

The Augusta Cotton Factory and the Sibley Manufacturing Co. both gave handsome displays of their fabrics and the style and texture of their manufactured goods, all of which proved the excellent opportunity the South offers to the manufacturer who comes to the home of the raw material to convert it into textures ready for the use of man.

The Columbus, Ga., exhibit was by far the most conspicuously magnificent in the Exposition Building, and was in charge of the Messrs. Walker Bros. Here were represented the home productions of the South in elegant display. The Eagle & Phenix Mills, the Muscogee Mills and the Clegg Mills, of this great Southern manufacturing center of cotton goods gave specimens of their work in at least a hundred varieties, from the raw material to suits of clothes ready for use and in numberless manufactured goods of many kinds, texture and variety.

It would require several pages of the MANUFACTURERS' RECORD to describe all the exhibit of the Piedmont Exposition, and it is with much reluctance that I draw the line here. Suffice it to say the Piedmont Exposition was a grand and magnificent epitome of the South's material wealth, growth and prosperity in the industrial arts and sciences, and furnished a wonderful revelation of our unequalled advantages and resources, which are but the corner-stones of a structure that, like the Temple of Solomon, will command the recognition of the men of all nations and for all ages.

HINTON A. HELPER.

## "The Future Sanitarium of the World."

**The Healthfulness and Beauty of Western North Carolina.**

[Editorial Correspondence MANUFACTURERS' RECORD.]

MCABOY HOUSE,

MCABOY, POLK CO., N. C., Oct. 30, 1887.

"My friends, North Carolina is the most glorious country upon which my feet or eyes have ever rested," said Pennsylvania's great statesman, Hon. Wm. D. Kelley, in a public speech after returning from the South, and the more I see of Western North Carolina the more fully do I endorse this enthusiastic tribute to the old North State. Two years ago it was my good fortune, while in search of a health-restoring climate, to hear of Polk county, N. C., and a six months' stay convinced me that the half had not been told. Nestling at the base of a great range of mountains nearly 4,000 feet high, encircling it on all sides except to the south, is Polk county, which has an average elevation of about 1,200 or 1,500 feet above the sea level. The peculiarity of this circling mountain range gives to this county a protection from cold, and adds to the wonderful charm of the climate throughout this far-famed mountain section; a freedom from coldness and dampness that can only be appreciated by those who have felt its exhilarating influence.

Reverently I have often thought that while the Creator could have made a more delightful climate than that enjoyed by this county, surely He had never done so. Here I have met people who have travelled through many lands, and I have yet to find one who does not readily admit that this is the best climate that he has ever found. In summer and winter alike it is charming, of course very warm at times and very cold at times, but never reaching such extremes that one cannot be comfortable, while in spring and in autumn no words can do it justice. Life grows brighter and one feels an exhilaration of spirit unknown in the low country as his lungs expand to the bracing balmy air of this heaven blessed "Happy Valley," a name by which some of its inhabitants love to call this region.

And truly it is a "Happy Valley." Surrounded by majestic mountains, whose towering summits afford views of surpassing grandeur and ever-varying beauty; watered by mountain springs and rivers almost without number; a soil that yields to the farmer and the fruit-grower a good return for their labor; settled by a happy and contented people, and so free from crime that an unlocked house is safe at night, and a lady can ride alone along these mountain roads without ever a fear of harm, Polk county is surely a favored land.

This section is every year becoming more widely known as a health resort, and especially for those suffering from lung and throat troubles. The remarkable dryness of the air, added to its bracing effect on the whole system, has restored to the full measure of health many who had abandoned all hope of recovery. Unfortunately the facilities for reaching this county have not been very good, as the one railroad which passes through it is of a somewhat primitive character, and is said by those who travel over it



to have only one object in existence, and that is always to be late. The provoking uncertainty as to when the trains will arrive or depart and the discomfort of the unclean cars, doubtless in times past kept many away from here. Recently, however, a through train, which is probably composed of somewhat more inviting cars, has been put on, running direct from Charleston to Asheville, 40 miles above this place. Then, with the exception of the McAboy House, for many years a charming place, which can accommodate 35 to 40 guests, the country is without any inviting hotels. There is one hotel at Tryon City, the only railroad station in the county, which is about 1½ miles from McAboy, but it has never given satisfaction to the travelling public. Just now, however, there is considerable rejoicing in the county over the fact that within the last few days it has been purchased by Dr. Cox, formerly a leading physician of Louisville, Ky., who settled here a few years ago for his health. Dr. Cox proposes to put the hotel in thorough order, repaint and refurnish, it and make it a pleasant place for winter and summer, and, still more important, to put it under the management of a good hotel man. Knowing Dr. Cox personally, I feel safe in stating that under his ownership the Tryon Hotel will prove a great addition to this section, and, in connection with the McAboy House, will be instrumental in doing an immense amount of good for the whole county.

The scenery throughout this region is indescribably grand. Winding around the mountains and leading up to their very summits are fairly good roads that can be traveled over in vehicles, and from every point new views of wonderful beauty are to be had. From the summits one can look off to the south, where, as far as the eye can reach, stretches out the comparatively level country dotted here and there with villages and towns, with farms and woodlands, so interspersed as to add variety to the scene, while to the north can be seen range after range of majestic mountains, seemingly piled in endless confusion, though between them lie great valleys watered by never failing streams that, winding on and on, "go laughing to the sea."

Seven miles from here is a magnificent water-fall which has few equals in this country. Forming on the top of a mountain, 4,000 feet high, it rushes down 2,600 feet, making several grand leaps in this great distance. A few miles in another direction are Melrose Falls, where a river breaking its way through the mountain gorges rushes with a great roar over huge boulders. Of all the weirdly, wildly beautiful spots of this mountain country this is probably one of the grandest. One may spend day after day and week after week visiting these scenes and never tire of their endless variety and charm. The greatest charm of all this country, though, is its wonderful balmy, bracing, health-giving and health-restoring climate.

R. H. E.

THE whole South has been benefited more than it will probably ever realize by the intelligent manner in which its resources and attractions have been explained to the general public, and especially to the class of men having money to invest in new enterprises, by the Baltimore MANUFACTURERS' RECORD. The South is indeed rich in the bounties which nature has bestowed, but it has required enterprise and capital to convert them into available forms. In the task of interesting men of money, brains and enterprise the MANUFACTURERS' RECORD has taken a conspicuous part, and its evident prosperity is a strong proof that its valuable labors are being duly appreciated.—Railway Register, St. Louis, Mo.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

## The Internal Revenue Tax.

NEW YORK, N. Y., Oct. 19, 1887.

Editor Manufacturers' Record:

I hope you will allow a fellow-townsmen to say a few words about the communication of Mr. J. M. Vernon on "The Treasury Surplus." Not occupying your space with approval of his many just views, I wish to call attention to paragraph numbered 1:

"1. If the internal revenue were entirely abolished it would be a great boon to the tobacco planter and remove an onerous tax upon the producer of the soil, and place him at liberty to dispose of his products at pleasure, instead of through licensed tobacco merchants, but in the case of alcohol it would be entirely different. It would be a flagrant outrage upon the general sentiments of the people and the industry of the country, nor would its trade and commerce receive any benefit therefrom. Public sentiment, as well as national policy, is opposed to granting king alcohol a free license to run riot throughout the length and breadth of the land at the expense of other necessary industries."

While all will agree as to the advantage to farmers and others which would accrue from power to sell tobacco as freely as other produce, it is thought that a worse effect of the tax on tobacco lies in the fact that by its incidence it throws the manufacture of cigars into the hands of large concerns, thus increasing the numbers of "those who do not own their own business"—a class which is the only hope of the anarchists in this country. The larger manufacturers of tobacco will be found fighting against repeal of the tobacco excise as vigorously as the one or two firms of match manufacturers fought against the repeal of the stamp duty on matches, and they will be helped in the fight by the labor agitators of the country.

The tax on fermented liquors has not produced so large and distinctive a class of wage-earners as the tobacco tax, but has built up a compact body of wealthy brewers in this city, whose political influence is understood to have been great enough with Secretary Manning to induce him to alter the classification of broken rice just before the last gubernatorial election in this State, and who have, in an effort to find investments for their money, filled our city with lager beer saloons far beyond the necessities of our population, so that their income has to be extended by pool tables and worse adjuncts, unnecessarily and artificially increasing the drunkenness and immorality of the town.

The tax on alcohol, amounting, as it does, to less than one cent on a drink of whisky, is but a cobweb in the way of rum drinking, but as it allows, or is the excuse for, selling the five-cent drink for ten cents, by increasing the rum-sellers' profits, so far as it influences drinking at all, it increases it by drawing a larger number to the traffic. It also, as do the taxes on tobacco and beer, discriminates against the small man.

Of the effect on the industries of our country, David A. Wells may be quoted, who says: "The first effect to be noticed of these internal taxes upon distilled spirits is their industrial influence. This amounted, in fact, to an industrial revolution, essentially modifying and even destroying great branches of industry." He then enumerates burning fluid, of which alcohol was the principal constituent. Druggists estimated the reduction in the use of alcohol in their business, consequent on its increased cost, at from one-third to one-half. "The increased price of vinegar, before manufactured largely from whisky, so far affected the cost of pickles and white lead as to greatly diminish domestic consumption and almost entirely prevent exports." And many other industries are mentioned as incommoded by the high price of alcohol. In addition to which and as a consequent, according to Mr. Wells, the consumption of opium was increased. To this day many industries are

curtailed or transferred to other countries, where a more intelligent view of manufacturing necessities is entertained, by the high price of alcohol.

But it is neither in the injurious effects seen from the concentration of capital in the hands of the whisky ring, nor in its injury to our industries, that the internal tax on alcohol exhibits the maximum of its mischief. It is to be found, as many of your readers know, in the mountain regions of the South, where it is impossible, on account of lack of transportation, to market grain, (the only resource of the farmers of that region,) except in the form of whisky, and leave the growers a livelihood.

The same considerations which led the inhabitants of Western Pennsylvania during Washington's administration into the "whisky rebellion" leads a community that a generation ago was not less upright and worthy into "blockading."

No American cares to write of the contempt of all laws and the crimes which have naturalized themselves among this body of at one time admirable men, and I think you will agree with me, Mr. Editor, that neither missionary labors nor the lapse of two generations will return those communities to the moral standard they maintained before the "whisky tax" forced them into law breaking.

The inconvenience to and repression of agricultural and industrial efforts; the increase of drunkenness and vice; the danger from socialism, and the demoralization of a whole section of country is to be maintained that, in the words of Worthington C. Ford, a writer of classic political economy, the lower strata of society may be made to bear their full share of the expenses of the State; or that the supposed sentiments of the people are not outraged; or that the larger gains of English manufacturers may be increased, and they have more money with which to encourage the increased cultivation of wheat, cotton and rice in India, and furnish transportation for the same.

2. "Put on the 'free list' animals of all kinds, breadstuffs, coal and coke, fish, flax, hay, iron and copper ores, marble and stone in the rough, provisions and dairy products, peas, beans, potatoes, lumber, wool, books, maps, etc., etc. The duties upon the aforesaid articles are now from 20 to 56 per cent. ad valorem, and in 1885 amounted to about \$10,000,000."

In regard to the "free raw material" doctrine implied above, I only wish to ask when it would stop and what would be its effect. Does any one in Alabama think that with free iron ores the mines of his State could have been opened, or that with free pig iron, the raw material of the New England manufactures, Birmingham could have been built up, or that the wonderful tales of Southern progress towards industrial supremacy and wealth recorded in your pages from week to week would have been written, or that cotton factories would be starting all over the South if they depended on Egypt or India for their raw material?

When an industry has accumulated capital and skilled workmen it may draw its raw material from a distance, as the Cleveland district in England now draws much of its iron ores from Spain; but industries are not started under those circumstances in a country where capital is scarce.

Some who consider themselves intelligent hold that a people cannot get rich unless they are impoverishing others. Ireland and India show the fruits of such theories. It may, I hope, be doubted if the people of the South will think that their market for cotton cloth will be extended by the poverty of our fisherman; that decreasing the profits of our grain growers will increase the markets for their agricultural implements; that helping England's shipping by allowing it to put down coal free of duty in the Gulf ports will develop coal mining, or that ruining the wool growers of New Mexico will extend the market for the small wares which we learn from the MANUFACTURERS' RECORD are being manufactured all over the South.

N.

## Many Facts of Interest.

### Newsy Notes, Agricultural and Manufacturing, from Mississippi.

[Special correspondence MANUFACTURERS' RECORD.]

ABERDEEN, MISS., October 22, 1887.

Up to the 16th of October sixty-three out of the seventy-four counties in Mississippi were represented at the State Industrial and Technical Institute for girls at Columbus. There were 396 young ladies in attendance, of whom 212 were in the dormitories of the State buildings. Mississippi has reason to be proud of this institution, as it is the only one of the kind in America.

Mr. R. S. Searles, of Iowa, has purchased a large tract of land in Pike county with a view to going into stock breeding on an extensive scale.

The Delta Farmers' Association will hold its next meeting at Greenville on the 8th of November.

Mr. C. T. Worthington, of Washington county, has sold this season to parties in Greenville 250 tons of Bermuda grass hay at \$15 per ton. His Bermuda grass pasture has also grazed and fattened a large number of cattle.

Vicksburg is agitating for a cotton factory, and the probabilities favor success. The vicinity can supply an abundance of excellent labor.

There are thirteen firms at Scranton, on the south coast, engaged in shipping oysters and fish.

In Biloxi, on the south coast, a new canning company has been organized by the Knights of Labor to can oysters, fish, shrimp, vegetables and fruit.

Hon. Robt. Lowry, governor of Mississippi, in a recent speech, said: "The assessed value of the property of the State is about \$120,000,000, but in truth \$400,000,000 would not buy it." The governor would have struck closer to the mark if he had said \$600,000,000 would not buy it.

There is not a finer region for pear culture in the world than the entire south coast of Mississippi, and we are glad to know that many horticulturists are devoting themselves to that industry. Around Ocean Springs hundreds of trees have been put out during the last two years, and they are so far exceeding expectations that many persons are preparing to plant pear orchards during the next twelve months.

Mr. Wm. Jolly, of Chickasaw county, planted a field of corn on the 4th of last June, and though it had but one rain, the yield is estimated at 25 bushels to the acre. We have known of fine crops of corn made in the Mississippi prairie from seed planted in July.

D. D. Jones, of Chickasaw county, reports 900 gallons of excellent sorghum syrup this season as the product of 3½ acres of cane.

Mississippi contributed by far the larger number of visitors who assembled at Memphis to welcome the President on the occasion of his recent visit, and the State was also very strongly represented in the vast crowds that greeted him at Atlanta and Chattanooga.

Hon. Jno. C. Burdine, of Smithville, writes us as follows in regard to the three counties that form his senatorial district in the State legislature:

"The corn crops in Monroe, Lee and Itawamba counties are at least twenty-five per cent. better than those of last year."

The pea crop in those counties is at least fifteen per cent. above last year.

Sorghum, owing to increase in acreage and quality, will exceed the crop of last year forty per cent.

Tobacco is fully ten per cent. better, and the dairy interest exhibits wonderful advancement, especially in Monroe and Lee counties. I will endeavor soon to furnish you with a number of instances of individual progress in farming and stock raising."

It is needless to say that the report of



Senator Burdine for the counties named is a fair one for the entire prairie region and Tombigbee valley of Mississippi, and any statement from his pen will be accepted everywhere in this State.

Mr. James G. English, of Monroe county, sends us the following reports of individual crops:

"Robt. Hill has made 75 bushels of fine corn on one acre of land this season, and made 100 gallons of very fine sorghum from a poor stand of cane on three-fourths of an acre. He also made three tons of German millet on a little less than one acre of land.

Mr. James Bryan made 200 bushels of peanuts on an acre and a half of land, in addition to saving all of the vines for hay.

Mr. R. A. Jones made 150 gallons of fine molasses off of  $1\frac{1}{4}$  acres.

Mr. E. Morgan made 225 gallons from  $1\frac{1}{4}$  acres of cane.

All of these farmers made fine crops of corn, peas, hay, pumpkins, etc., and have succeeded admirably with their cattle, and can show several beautiful colts apiece."

Prof. Laws, the celebrated veterinary surgeon of Cornell University, and Mr. Roberts, son of the Professor of Agriculture of that institution, have purchased two thousand acres of land in Madison county with a view to the immediate establishment of a grass farm for fattening stock for market, depending entirely upon the native grasses, Bermuda and *Leptodesia Striata*. Mr. Roberts will take personal charge of the enterprise and become a citizen of our State. This investment is the result of a visit by Prof. Roberts to Mississippi last year, upon which occasion he fully satisfied himself as to the enormous stock-breeding, dairying and hay-making resources and possibilities of our State.

The shipments of lumber from the port of Pascagoula for the week ending October 21st was unusually small, owing to the prevalence of storms on the Gulf, but footed up 694,264 feet, of which 558,111 went to Dieppe and 136,153 feet to Key West, Fla.

The Meridian Board of Trade has opened books to the stock of a steamboat that it proposes to put on the Mississippi river to run in its own interest between St. Louis and Vicksburg, in connection with the Meridian & Vicksburg Railroad.

The Mississippi Nursery Co., at Marion, in Lauderdale county, which has hitherto confined itself exclusively to wholesale dealing, has determined to organize a retail department.

The Meridian Fertilizer Factory is enlarging its works, and expects to be prepared to meet all orders next season. During the last season—its third year—the sales of the factory amounted to 6,600,000 pounds.

In Winston county, which is a little north of the center of the State, some of the hills rise to a height of 1,500 feet above the sea. There is little doubt but that minerals abound within its limits, and its vineyards aggregate many hundreds of acres.

The claim of Robinson & Co., of Meridian, to having the most extensive manufactory of brick in the State will probably only be disputed by C. H. Berg & Co., of Aberdeen, and Taylor & Co., of Jackson.

The Meridian Planing Mills are now taking contracts for erecting buildings in Alabama, Florida and Louisiana, as well as Mississippi, shipping all of the wood-work from their factory completed and ready to put together as soon as unloaded.

Fifty looms and 1,200 spindles have recently been added to the plant of the East Mississippi Cotton Mills, in Lauderdale county, giving it now 2,500 spindles, and it is now manufacturing yarns, carpet warp, rope, batting, Lowells and Asudburgs. It employs about 150 hands, who, like the operatives of all other Mississippi cotton and woolen factories, are white natives of the neighborhood.

The Meridian Candy Factory is doing a flourishing jobbing trade in Mississippi and neighboring States.

The extensive "Star Livery and Sales Stables" at Aberdeen, that burned down several years ago, are being rebuilt by Mr. Hooker.

The shipments of cotton from Aberdeen to October 13th amounted to 2,899 bales, against 1,225 bales to same date in 1886. The receipts to corresponding dates bear about the same proportion.

The work of constructing the Tombigbee river bridge for the Aberdeen branch of the Kansas City, Aberdeen & Birmingham Railroad will be completed in December.

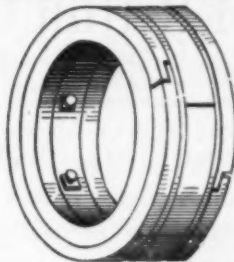
The Aberdeen Examiner says: "Mississippi looks the approaching winter right straight in the eyes without winking or blinking, for her corn-cribs and hay-racks are full to overflowing."

### Special Machinery.

Devices that do away with laborious methods and uncertain results must ever be a source of interesting study for the student of mechanics and the manufacturer who watches the progress of industrial art. The illustrations in this article present features that must commend themselves to those connected with the metal working industry. The cut following shows a neatly constructed portable cylinder boring machine.

This machine is designed for re-boring all makes and sizes of steam engine cylinders, pumps, steam hammers, blowing engines, air

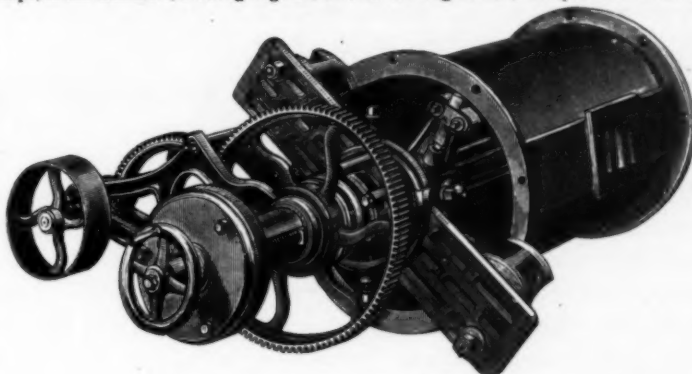
ing out, and fast for finishing cuts. The feed is automatic and constant, and at the pressure of the operator. The bar is driven by a train of powerful cut gears either with a crank or belt for power. With this bar is furnished a self-centering chuck that fits in the stuffing box supporting the bar perfectly central at that end. Also two cross-heads and bearings are furnished to support the bar when both cylinder heads are off. In many instances this tool is particularly valuable, requiring to be only the length of



ST. JOHN'S CYLINDER PACKING.

the cylinder, and the bearings for it, bar and screw, are made of cast steel and are fitted for doing very rapid and exact work. The machine is made in as many as 28 different sizes.

This cut shows the portable cylinder boring machine re-boring in its present position on the engine bed, the cylinder of a mining

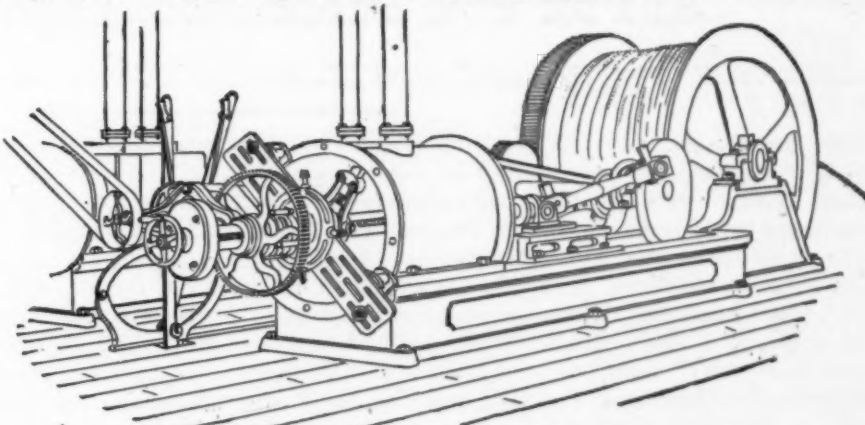


PORTABLE CYLINDER BORING MACHINE.

compressors, mining and hoisting engines, corliss valves, hydraulic and steam hoists, heavy housings, large wheels, etc. It will bore with one or both cylinder heads off, either vertical, horizontal, or inclined on the engine bed, or laying on the ground. It is so constructed that the piece being bored serves as the bed or support of the bar. It is only necessary to take off the cylinder head and remove piston, when the cylinder

engine. These machines are used for re-boring in their present positions, all makes and sizes of steam engine cylinders, pumps, steam hammers, blowing engines, air compressors, mining and hoisting engines, corliss valves, hydraulic and steam hoists, heavy housings, large wheels, etc.

The accompanying cuts illustrate St. John's self-adjusting cylinder packing for steam engines, water, air, oil and ammonia pumps.



PORTABLE CYLINDER BORING MACHINE IN POSITION.

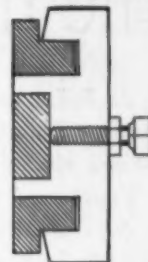
can rapidly and accurately be bored out. This saves breaking the steam joints, bolts, etc., and often cylinder can be re-bored in less time than it would take to remove cylinder from its bed.

The cutter-heads are fed by a screw in one side of bar, and are operated by the feed-casing on the end that contains the gearing, by changing position of which two changes can be made, slow feed for rough-

A general view of the packing is shown in Fig. 1, and the sectional view in Fig. 11 shows arrangement of it. The two L-shaped rings are fitted in grooves in the bull ring, and are quite elastic, being set out against the walls of cylinder by steam. The proportions are so nicely made, and the pressure of the steam sets them so gently that scarcely any wear takes place, and they are perfectly steam tight. Friction being reduced to a

minimum, no cutting of the cylinder surface ever takes place. The center ring is fitted into the bull ring, and is adjusted by the set screws so as to carry the piston central and hold it steady, thereby relieving the steam rings, and leaving them free to act upon every portion of the circle of the cylinder, and to adjust themselves to inequalities of diameter. In all places where now in use, it has very materially increased the power and decreased the consumption of coal.

These devices have secured general favor



throughout Pennsylvania and have made great progress in other sections. They are among the special products of Pedrick & Ayer, proprietors of the L. B. Flanders Machine Works at No. 1,025 Hamilton street, Philadelphia.

THE Seneca Falls, (N. Y.) Reville, referring to the fact that the Silsby Manufacturing Co., of that city, have commenced the manufacture of steam heaters, says: "Looking into the subject of steam heating, the Silsby company found that a demand was springing up for a simple and cheap low-pressure steam generator which could be placed in small and medium sized dwellings, with the necessary piping and radiators, at a moderate cost. They at once determined to engage in the manufacture of such a heater, and finally settled on the "Comfort" heater, which was being made at Norwich, Conn., by H. J. Adams, E. S. Staples and R. H. Arnold, as being the very best on the market. Negotiations were begun which resulted in the Silsby's securing the sole right to manufacture this heater, and Messrs. Staples and Arnold are now residents of this village and engaged with the Silsby company, while Mr. Adams will represent the company as traveling salesman. The advantages of steam over all the methods of heating are well known. Taking into consideration health, economy and convenience, it cannot be equalled. Any of the heaters made by the Silsby company are as easy to run as a parlor stove, and do not need looking after oftener than once or twice a

day, and then only to shake the grate and supply the magazine with fuel. No brick work is required, but the cellar is not heated. Coal and ashes do not have to be carried through the house, and dust is avoided. The heaters are automatic, and a small or medium size house can be warmed throughout with about the same consumption of fuel as an ordinary base-burning coal stove."

# SHEFFIELD

◆ COLBERT COUNTY, ALA. ◆

## The Iron Manufacturing Center of the South.

**B**EING at the *head of navigation*, and on the *south bank* of the Tennessee river, Sheffield is the *natural outlet* for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best *distributing point* over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. *Four railroads* certain, and several others assured. *Principal shops of Memphis & Charleston Railroad* will be erected here pursuant to written contract. These will employ between *four hundred and five hundred mechanics*, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

### ◆ Five Blast Furnaces Now Under Construction, ◆

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that *iron can be manufactured more cheaply* at Sheffield than at Birmingham, and its *river transportation facilities* will enable Sheffield iron to reach the principal markets at a saving of from

**\$2.00 TO \$2.50 PER TON.**

A first-class semi-weekly newspaper, printed by steam, is regularly issued. Furniture Factory, Bottling Works, Bakery, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five-story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Contracts have been made for the early erection of Electric Light Works, Paint Works, Agricultural Implement and Machine Works and Cotton Compress. Large Stove Works, Machine Shops, additional Iron Blast Furnaces, an extensive Charcoal and Chemical Plant, a large Rolling Mill and other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

*Drainage excellent. Splendid opening for men of push and energy. No "Old Foggy" element here.*

*No better point for profitable investment.*

## ◆ Sites for Manufacturing Enterprises, ◆

**And for Free Public Schools and Churches**

**Donated by Sheffield Land, Iron & Coal Company.**

Population January 1st, 1887, 700; now, (August 21st, 1887,) by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

**LIMESTONE** of excellent quality for *fluxing iron* in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of *brown hematite iron ore* within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the *Warrior Coal Fields*, which abound in first-class *coking, steam, gas and grate coal*. Timber is abundant and cheap.

The *Memphis & Charleston Railroad* and the *Sheffield & Birmingham Railroad* are now in operation into Sheffield. The *Louisville & Nashville Railroad Co.* is now extending its *Nashville, Florence and Sheffield* division, which will be completed to Sheffield before the close of the year 1887. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the *best combined river and railroad transportation center* in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. *More are needed.* For further information address

**ALFRED H. MOSES, Vice-Prest. and Manager**

**Sheffield Land, Iron & Coal Co., - Sheffield, Ala.**



# Tuskaloosa, Ala.

\* ALABAMA'S NATURAL PITTSBURGH. \*

**A Railroad and River Town of 6,000 Inhabitants, in the Coal, Iron and Timber District.**

Healthful Location. Salubrious Climate. School Facilities Unequaled by any other town in the South.

+ SITUATED ON +

**Queen & Crescent**

— TRUNK LINE, —

IN THE

**Warrior Coal Field**

AND ON THE

**WARRIOR RIVER.**

Only Navigable River touching the

**Alabama Mineral Field.**

Eight Months Navigation. Being Surveyed  
now to be opened all the year round.

All Water Navigation to

❖ **MOBILE** ❖

AND THE

**Entire Gulf and Atlantic Coasts.**

THE

**Tuskaloosa Northern Railroad**

Is now under construction into the

**MINERAL and TIMBER FIELDS.**

— THE —

**Macon & Tuskaloosa Railroad**

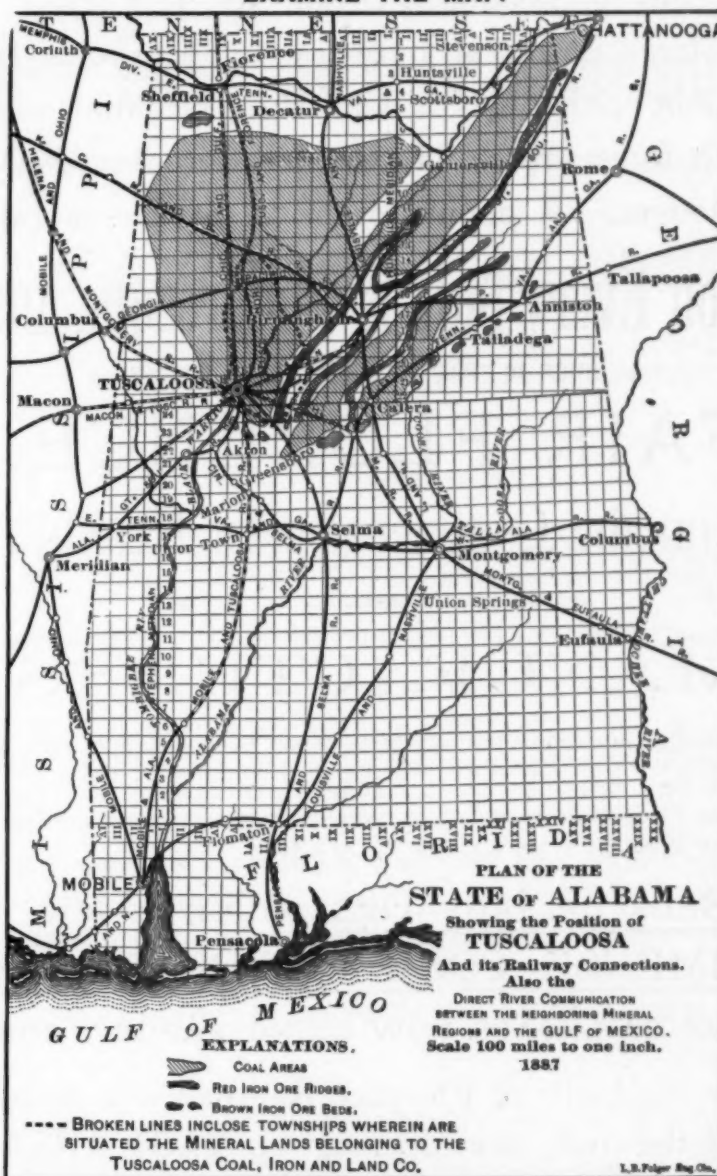
Will soon be building into the

**COTTON REGION OF MISSISSIPPI.**

**Fine Farming Region**

Around and Below the City.

"EXAMINE THE MAP."



Superior Inducements

AND

+ ADVANTAGES +

TO ALL

Manufactories Consuming

**WOOD,  
IRON,  
COTTON.**

**FINE COOKING COAL**

In workable veins near city, fully tested.

◀ The Fire-Clay ▶

Existing in inexhaustible quantities, has been  
practically tested and pronounced

The Best yet Discovered in the South.

**Street Car and Dummy Lines**

NOW BUILDING.

▶ Water Works and Electric Lights ◀

TO BE PUT IN AT ONCE.

**COTTON MILL**

In Successful Operation.

ALSO

**LARGE BRICK WORKS**

COTTON-SEED OIL MILL, &c.

Manufacturers Seeking Locations in the South have here

## THE GOLDEN OPPORTUNITY.

Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

ROOM FOR ALL.

**THE Tuskaloosa Coal, Iron & Land Co.,**

Owning 4,600 acres of city and suburban property, and 40,000 acres of mineral and timber lands, offers liberal inducements to manufacturers to locate at Tuskaloosa, Nature's City, and invites correspondence and the fullest investigation of its claims. Address

**W. C. JEMISON,** President Tuskaloosa Coal, Iron & Land Co., **TUSKALOOSA, ALA.**

# Florence, Ala.

## County Seat of Lauderdale County.

At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,  
which will be open Jan. 1st, 1888.

**SITUATED** on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

— 'FAIR FLORENCE.' —

There is no Place on the Continent more Healthful and Salubrious.

## MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces.	One Saw Mill,	One Cotton Mill,	Two Brick Machines and
One Rolling Mill,	One Flour Mill,	One Cotton Compress and Ice	Three Hand-Brick Yards.
Three Planing Mills,	One Wooden-Ware Factory.	Factory.	

There are VAST BEDS OF IRON ORE within a few miles North and  
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay, and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

*All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.*

Pamphlets and maps furnished on application to

# Florence Land, Mining & Manufacturing Company.



# GADSDEN, ALA.

Is situated on the West Bank of the COOSA RIVER, in the midst of the

## RICHEST IRON AND TIMBER SECTION

IN THE FAVORED STATE OF ALABAMA.

### ➤ The Gadsden Land and Improvement Company ➤

Own large tract of Eligibly Located Residence Property in the Most Desirable Part of the City, and have fine location on river and railroad for

### MANUFACTURING ESTABLISHMENTS,

And are offering great inducements to manufacturers to locate their plants in this *FAVORED LOCALITY*. No place in the South has such *Wonderful Advantages*. Situated in the midst of the *RICHEST IRON SECTION in the STATE*, at the foot of Lookout Mountain on the banks of a Navigable River, (*THE BEAUTIFUL COOSA*.) surrounded by Forests of the Finest Timber on the Continent, with Fine Building and Fire Clay, and the *FINEST BUILDING STONE* all around us, with

**Uninterrupted Health, and the Purest and Best Water and Finest Drainage of any City in the State,**

**Gadsden should become the Greatest Manufacturing Center of Alabama.**

THE Alabama Great Southern, Rome & Decatur, Tennessee & Coosa, Anniston & Cincinnati Railroads, with the ever-flowing Coosa navigable the year round, gives us as *FINE TRANSPORTATION FACILITIES* as any other city enjoys.

We now have Railroad Car Works, Furnaces, Foundry and Machine Works, Saw Mills, Sash, Door and Blind Factory, Furniture Factory, Ice Factory, Paint Mills, Grist and Flouring Mills, Cotton Ginnery, Fine System of Water Works, Electric Lights, Telephone Communication over City, and also to neighboring cities Atlanta and Rome, Ga.

**WE WANT** Rolling Mills, Bridge and Bolt Works Cotton Factories, Woolen Mills, Furniture Factories, in fact all kinds of Factories, even Coffin Factories, (but we want to ship the Coffins to some of the other booming cities.)

Liberal Grants of Land will be made by THE GADSDEN LAND AND IMPROVEMENT CO. to any of the above-named industries.

FOR FURTHER PARTICULARS ADDRESS —

**M. L. FOSTER, Sec. & Treas.**

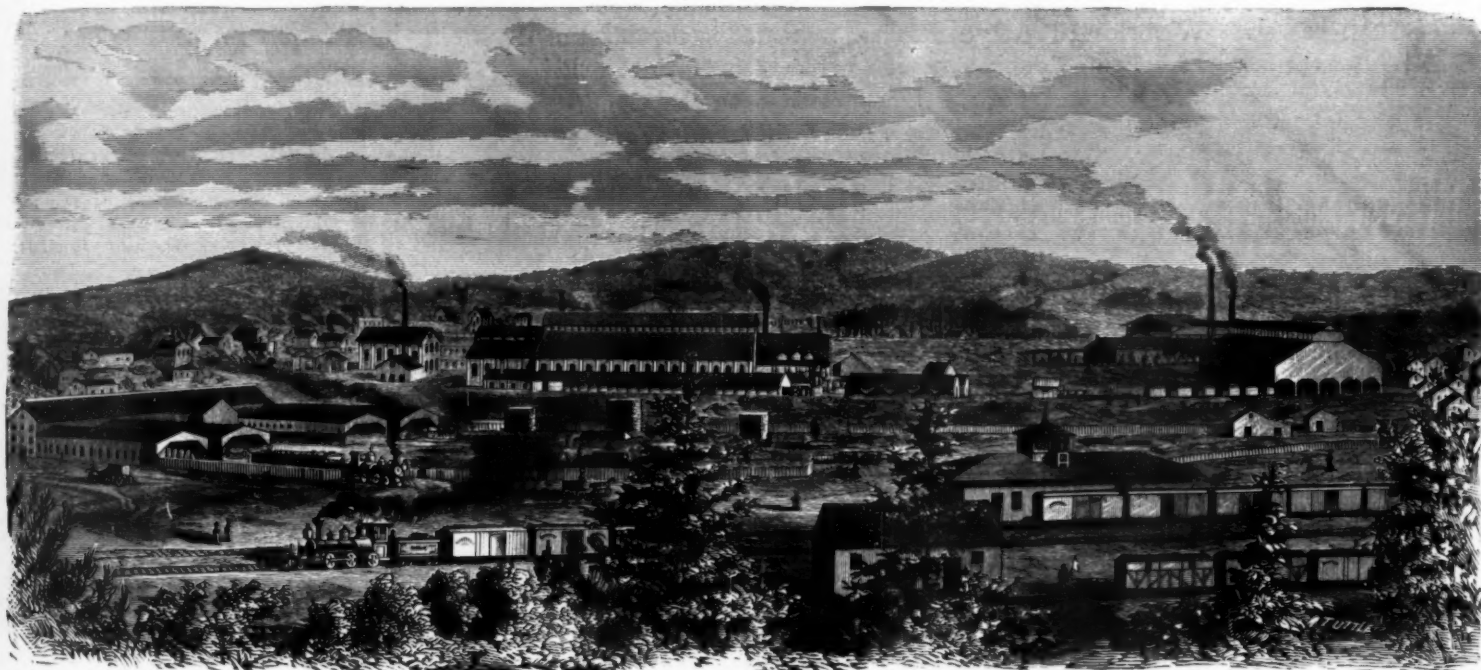
The Gadsden Land and Improvement Co.,     ⋄⋄⋄     Gadsden, Ala.

POST-OFFICE BOX 145.

# ANNISTON, ALA.

## "The Model City of the South."

**T**HERE is no healthier or more charming place of residence in America than Anniston; built on the slope of one of the highest of the chain of the Blue Ridge in Alabama, it commands scenery that is unapproachable in the State. Nature could not have formed a more beautiful place for man to build a city or given greater natural advantages. The natural drainage is most thorough and complete, while in addition the city is preparing a system of underground sewerage. *A more delightful and invigorating climate cannot be found anywhere:* mild in winter, cool in summer, a thousand feet above the Gulf, with the high and broken chain, range after range in the east, Blue Mountain in the north, Coldwater Mountain in the southwest, make Anniston the *coolest, healthiest and most attractive of any city in the South.* It has the richest agricultural country surrounding and tributary to it in the State, to support a manufacturing and mercantile population. The mountain sides will grow the grape and every kind of large and small fruit to perfection, and the valleys every product of diversified farming. *It is in the heart of the richest mineral district of the South,* and commands the great fields of brown hematite ores on which the great and successful manufacture of iron must in the end depend for quality and profit in every branch of most skillful and best manufactures of iron and steel. It has tributary to it *the best and most extensive pine forests in North Alabama,* that are reached by roads owned and controlled by Anniston citizens, while it has secured to its industries the very best coal mines and coking coal in Alabama. There is no city in America, in proportion to population, that has the manufactures of Anniston, or employs as many working men, or does a larger mercantile business. The industries already in full and profitable operation in Anniston are the **two Woodstock Furnaces** producing six hundred tons of Standard Car Wheel and Malleable Iron per week, and the **two Clifton Furnaces**, tributary to Anniston, producing nearly as much more. The **Car Works** are fully employed turning out forty cars per week, and are introducing new machinery and larger engines to increase their capacity to twenty cars per day. The **Rolling Mill and Car Wheel Foundry and Steam Forge** are among the largest in the South, of a capacity of two hundred wheels, a consumption of 120,000 pounds of metal per day, exclusive of the Rolling Mill and Steam Forge. These works are being enlarged to meet the increasing demands upon them. The **Cotton Factory** is one of the largest in the South, containing 11,700 spindles, and is running to its full capacity, while the foundry of **Murray & Stevenson**, and machine shop of **Pindar & Co.**, and planing mills of **Miller & Smith** and **Farrar & Co.** employ a large number of men and are crowded with work. The new industries that are now under way and provided for will within the next twelve months **Add Four Thousand Additional Working Men to Anniston's Population.** Two of the **Largest Iron Furnaces in the South**, capable of producing two thousand tons of iron per week, are progressing rapidly, and one of the **Largest and most complete Pipe Foundries in the world for the production of Gas and Water Pipe** is under construction,—it will employ nine hundred men.



CAR WORKS, ROLLING MILL AND BLAST FURNACES—ANNISTON.

The **Steel Bloomery**, for the production of Steel Blooms, is nearly completed, and the **Fire-Brick Works of Taylor & Sons** are ready for operation. The **Ninety-Inch Morse Cotton Compress**, with its warehouses, will be ready to receive the coming crop. Forty thousand bales, it is estimated, will be secured to Anniston from the territory that its system of railroads have opened up. The completion of the **Anniston & Cincinnati Railroad** during the present year, that will be owned and controlled by Anniston's citizens, opens up new territory and forms a *New and Shorter Grand Trunk Line to Cincinnati and the great Northwest, and to the Southwest via New Orleans and Shreveport.*

It is only the profits of business and labor that can add to the wealth of a community, add to or maintain the value of real estate, and add to the prosperity of its people. Having this in view, every industry and business in Anniston is established on a *profitable* basis. All its merchants are doing a large and profitable business, far larger than they prepared for or anticipated; it is the same with the manufacturers, while *not a dollar of debt has been created*, either by issue of a bond or placing of a mortgage on any of its old or new industries, leaving their earnings free from fixed charges that must be paid in times of depression as well as of prosperity. *To the investor, either in business, manufacturing or real estate,* nowhere else are presented opportunities as safe, secure and certain as at Anniston, or where they can rest on as healthy and solid foundation. It has trunk line railroad communication with all parts of the United States, and freight rates with the most favored of Southern cities. Two lines of railroads are owned and controlled in the interest of Anniston by its own citizens. *It has the best system of Water Works*, with the purest well water from three hundred feet below the surface, drawn from white quartz sand and gravel, and distributed through the city, with a pressure of 100 pounds to the inch, from a reservoir always full, protecting the city against fire and giving it the lowest rate of insurance. *The city is practically free from debt, and taxation limited to one-half of one per cent.* The means for education are the very best. Public Schools of a high grade are provided. One of the finest and best institutes for Young Ladies has been opened, and a College for Boys and Young Men, to which a School of Technology and Chemical Assay Laboratory have been added, is now nearly completed, and the best of teachers and professors secured for both. There are *Churches for all denominations*, and *Hotel Accommodations that are not surpassed in Europe or America.* The **ANNISTON INN** provides the quiet and comfort of the most luxurious home. *The streets are wide, macadamized, and rolled hard and smooth for pleasant drives.* **STREET CARS AND DUMMY LINES** are being built to different parts of the city, and the **ELECTRIC LIGHT** service enlarged and improved, leaving nothing undone to promote the comfort of its citizens and maintain and increase the value of their property and profits of their business.

The **Anniston City Land Company**, or the **Bureau of Information**, will give any information desired when applied to, and invite all wishing a charming place in which to live, to do business or to make profitable investments, to visit

—● ANNISTON. ●—



# CONSTRUCTION DEPARTMENT

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

## ALABAMA.

**Anniston.**—If the contemplated car and locomotive works previously reported as probably to be started in connection with Noble Bros. car wheel and car works are established. Mr. John Noble intends to build a new rolling mill. Reported that the plans for the new car works, to employ 1,200 or more hands, have been about consummated.

**Birmingham.**—It is rumored that a large iron furnace will be erected.

**Birmingham.**—The Lake Superior Land Co. has been organized with John T. Reed as president, and W. S. Brown, secretary and treasurer.

**Birmingham.**—M. Williams will erect a \$7,000 addition to his property on Eighth street.

**Birmingham.**—The Magic City Hotel Co. are building a three-story brick hotel to cost \$11,000.

**Birmingham.**—Bids for erecting a two-story building, 75x300 feet, are being received by Sutcliffe & Armstrong.

**Decatur.**—The Louisville & Nashville Railroad Co., previously reported as to build large machine shops, will receive bids for their erection until November 10. Address R. Montfort, resident engineer, Louisville, Ky.

**Decatur.**—It is reported that a building will be erected to furnish shop room and power for small manufactories. If correct the Decatur Land, Improvement & Furnace Co. can probably give information.

**Decatur.**—A stock company will be formed to build gas works. The Decatur Land, Improvement & Furnace Co. can probably give information.

**Decatur.**—Frank O'Brien, of Birmingham, has contracted to build the \$100,000 opera house lately mentioned as to be erected by the Decatur Land, Improvement & Furnace Co.

**Decatur.**—A grist mill is being erected by W. W. Fulghum. The capacity will be about 500 bushels per day.

**Gadsden.**—Felix Leonard contemplates erecting a grist mill.

**Huntsville.**—The North Alabama Improvement Co. will enlarge their Monte Sano Hotel and build a number of cottages.

**Huntsville.**—N. M. Johnson is erecting a corn and feed mill.

**Jackson.**—Messrs. Jones & Bailey are prospecting for silver ores.

**Leeds.**—Machinery has been purchased for a saw mill.

**McCalla.**—A saw and grist mill is being erected by Waggoner & Wallace.

**Mobile.**—James McArthur is erecting a box factory on Royal street. Will employ 30 hands.

**Montgomery.**—The report referred to last week that the Southern Cotton Oil Co. would enlarge their mill is correct. They have purchased machinery to double their capacity.

**Montgomery.**—The Highland Park Land Co. still contemplate building a winter hotel.

**Montgomery.**—C. P. Rogers, of Leeto-hatchie, has contracted to make the preliminary surveys for the proposed Montgomery & Camden Railroad.

**Opelika.**—It is reported that H. D. Fisher of Jackson, Mich., will build an ice factory at some point in Alabama, probably Opelika. R. A. Mitchell, Opelika, can give particulars if anything is done.

**Oxmoor.**—It is reported that Samuel Thomas, president Pioneer Mining & Manufacturing Co., of Birmingham, and J. H. Woodward will build a rolling mill near Oxmoor.

**Rock Mills.**—The Rosedale Manufacturing Co., reported last week as to put in new machinery, are adding 80 looms, &c., and expect to make twilled duck. This company succeeds the Wehadkee Manufacturing Co., previously mentioned.

**Sheffield.**—The Sheffield Marble & Phosphate Co., capital stock \$100,000, has, it is reported, been formed.

**Sherman.**—A steam grist mill and gin has been erected near Sherman by Mr. Mangum.

**Talladega.**—It is reported that Michigan parties contemplate starting several enterprises. If anything is done the Talladega Land & Improvement Co. can give particulars.

**Tuskaloosa.**—The Tuskaloosa Lumber Co. has been organized with a capital stock of \$45,000.

**Union Springs.**—The company reported last week as to establish a spoke and handle factory has been organized by H. R. Dudley and others. Machinery for the factory is now being added to the planing mill of Mr. Dudley.

## ARKANSAS.

**Arkadelphia.**—The Arkadelphia Lumber Co. have, it is stated, put planing machinery in their mill.

**Arkansas.**—The Salem Iron Works, of Salem, N. C., contemplate starting branch works at some point in Arkansas.

**Bear.**—The Old Bear Mountain Mining Co. are developing mines.

**Dallas.**—Lee Worthington has sold an interest in his mines to Hopkins Bros., of Illinois, who will, it is stated, erect a 40-ton Bartlett smelter.

**Helena.**—The contract to build the 8 miles of leveeing, lately reported, has been let to J. S. McTighe & Co., of Memphis, Tenn.

**Hot Springs.**—The Waverly Mining Co. are developing mines 10 miles from Hot Springs.

**Hot Springs.**—J. L. Ford will move his steam laundry from Pine Bluff to Hot Springs.

**Little Rock.**—Joseph Dart, representing James E. Reynolds & Co., of Brooklyn, N. Y., and others, have been examining the Quapaw Cotton Mills, with a view to purchasing and putting them in operation. If purchased the manufacture of sheeting will be added.

**Little Rock.**—The Little Rock Dummy Railroad Co. is being organized. C. M. Butler and E. W. Gibb are probably interested.

**Montgomery County.**—The Spanish Dig Mining Co. of Riverton, Neb., will develop mines in Montgomery county. They propose to begin operations at once.

**Mountain View.**—H. Ramsey has purchased a site to build a hotel.

**Paragould.**—The Paragould & Buffalo Island Railway Co., reported last week, will

complete their road to the St. Francis river by January 1, and contemplate extending it 16 miles further to Cotton Plant, Mo.

**Powhatan.**—James P. Coffin will receive proposals for building a courthouse until December 5. \$10,000 has been appropriated for the building by the county court. They are talking of building an iron bridge to cost about \$15,000.

**Texarkana.**—The Texarkana Ice Co., previously reported as to put in a 25-ton machine, will increase their capital stock \$30,000.

## FLORIDA.

**Apopka.**—C. A. Hege will, it is stated, build a hotel.

**Apopka.**—A cigar factory and a steam laundry are talked of.

**Bluff Springs.**—The Pritchett Gin Co. has been formed.

**Bridgeport.**—Jacob Hochstrasser, of Berne, N. Y., will build a hotel.

**DeFuniak Springs.**—The DeFuniak Lumber Co. have erected a saw mill with a daily capacity of about 30,000 feet, and have purchased machinery to build a planing mill. Will also build a pole road.

**DeFuniak Springs.**—The DeFuniak Springs Woolen & Cotton Manufacturing Co., capital stock \$25,000, has been organized. A site for their mill has been selected. C. C. Banfill can give information.

**Glen St. Mary.**—A saw mill has been erected.

**Jacksonville.**—A. O. Buck is reported as erecting a carriage factory.

**Lake City.**—The Florida Tobacco Producing & Trading Co., lately reported as chartered, will erect buildings for packing purposes, warehouses, &c.

**Macclenny.**—F. A. Miller, of Philadelphia, Pa., has started a cigar factory.

**Macclenny.**—Edwin S. Shuey and others are organizing a \$25,000 stock company to erect a 10-ton ice factory and a cold storage warehouse.

**Macclenny.**—A gin and cotton compress has been erected at a cost of \$10,000.

**Marianna.**—The Chipola Hotel Co. are preparing to build a hotel.

**Orange City.**—J. F. Brown is making arrangements to build a hotel.

**Palatka.**—The Palatka, Lake Harris & Gulf Railroad, reported last week, has been chartered by J. A. Larned and O. W. Bromwell, of Palatka, and William B. Hayes, of New York. It will extend from Palatka to the Manatee river at Palmetto.

**Palatka.**—Sherman Conant, Charles B. Fenwick, W. P. Couper and J. H. Farrington have chartered the Palatka, Welatka & Lake Railroad Co., to build a railroad from Palatka to the St. John's & Lake Eustis Railroad, with a branch to Georgetown.

**Pensacola.**—The Pensacola Board of Health, W. K. Hyer, president, are investigating the Waring system of sewerage with a view to its adoption.

**Pensacola.**—A shoe factory is reported to be established.

**Pensacola.**—The Pensacola Gulf, Land & Development Co., previously reported, are negotiating for the establishment of car works.

**Quincy.**—A cigar factory is to be established by Charles Vogt.

**Silver Springs.**—George S. Mayo is building a laundry.

**St. Augustine.**—The St. Augustine Improvement Co. will erect wood-working machinery.

**Tarpon Springs.**—W. H. Veale and Mr. Varmedoe, of St. Augustine, have received the contract to grade and furnish cross-ties

for the extension of the Orange Belt Railroad from Tarpon Springs to Petersburg, 17 miles.

## GEORGIA.

**Abbeville.**—There is talk of a cotton factory being erected.

**Atlanta.**—The Cooper Piano Manufacturing Co. will, it is said, start a factory soon.

**Atlanta.**—Broomhead & Shut have contracted to erect a building for Spelman Seminary to cost about \$10,000.

**Augusta.**—The Druid Park Land Co., capital stock \$200,000, has been incorporated by James P. Verdery, Patrick Walsch, Boykin Wright, W. C. Sibley, John L. Maxwell, Charles Estes and others. The company is privileged to build street railroads.

**Augusta.**—The Thompson Houston Electric Light Co. are, it is reported, building new works.

**Augusta.**—George R. Lombard & Co. are enlarging their foundry, machine and boiler works by an addition 70x300 feet and one 50x150 feet, and are erecting a two-story building, 30x60x70 feet, for storage purposes.

**Brunswick.**—It is reported that the Brunswick & Western Railroad Co. will spend \$500,000 in improving their road-bed and purchasing additional rolling stock.

**Calvary.**—James J. Higdon will rebuild his saw mill reported last week as burned if he can purchase machinery satisfactorily.

**Canton.**—Pickens county will build a courthouse to cost about \$10,000. Samuel Tate, C. B. Vincent and others have been appointed a committee to superintend its construction.

**Cartersville.**—Wikle & Wilkes contemplate starting a steam laundry and want bids on a 10 horse-power engine and machinery.

**Chauncey.**—A. B. Steele will rebuild his dry kiln reported last week as burned.

**Conyers.**—The Conyers Gold & Granite Co., reported last week, are opening a granite quarry.

**Dooly County.**—A town to be called Cordale will be started at the junction of the Americus, Preston & Lumpkin Railroad with the Georgia, Southern & Florida Railroad.

**Dublin.**—Thomas H. Rowe will rebuild his gin reported last week as burned.

**Elberton.**—Efforts are being made to secure the erection of a fine hotel.

**Fayetteville.**—Bids for enlarging and improving the courthouse will be received until November 28 by L. F. Blalock.

**Jackson.**—H. P. Almand is making arrangements to start a fertilizer factory.

**Macon.**—There are prospects of car works being erected at Enterprise. Payne & Willingham can probably give information.

**Macon.**—Payne & Willingham have built an addition to their furniture factory.

**Midville.**—Allen W. Jones has rebuilt his gin reported last week as burned.

**Perry.**—The Perry Manufacturing Co. have decided not to move their factory to Macon as lately stated.

**Rome.**—The Rome & Carrollton Construction Co. have, it is said, let the contract to build the 100 miles of the Chattanooga, Rome & Columbus Railroad, lately reported, to Lee, Garsey & Underdunk.

**Savannah.**—The Savannah Street & Rural Resort Railroad Co., previously reported, are about to commence work on their road. The cost is estimated to be about \$100,000.

**Savannah.**—The Birmingham & Atlanta Air-Line Railroad Co., the Birmingham, Georgia & Florida Railroad Co. and the Macon, Lagrange & Birmingham Railroad Co. will probably consolidate.

**Tallapoosa.**—The Tallapoosa Land, Mining & Manufacturing Co. are negotiating with parties to develop marble quarries.

Tallapoosa.—It is reported that M. E. Cason, of Hodges, S. C., will erect a large five-story building and will build a dry kiln.

Tallapoosa.—The Tallapoosa Land, Mining & Manufacturing Co. have discovered tin ore on their lands and will develop it if investigations prove satisfactory.

Tallapoosa.—The Tallapoosa Land, Mining & Manufacturing Co. are negotiating with Mr. Sloss, of Birmingham, for the erection of an iron furnace and steel bloomery.

Tallapoosa.—The Tallapoosa Machine & Foundry Co. have ordered machinery for their foundry and machine shop.

#### KENTUCKY.

Ashland.—An electric light plant is projected. If anything is done the mayor can probably give information.

Ashland.—Efforts will be made to organize a stock company to start a stove foundry. J. M. Huff can probably give information.

Bowling Green.—The committee reported last week as appointed to receive bids for an electric light plant have contracted for a Jenney plant.

Hawesville.—The Hawesville & Pellville Mineral Railroad Co., previously reported, have organized with D. L. Adair as president, and Robert Winn, of Pellville, secretary.

Louisville.—The German Insurance Bank are erecting a \$25,000 building on Market street.

Louisville.—A \$10,000 tabernacle will be built on Broadway. John B. McFerren can give particulars.

Louisville.—The Ohio Valley Press Brick Co. have changed their name to the Hydraulic Press Brick Co., and increased their capital stock to \$150,000.

Louisville.—The Louisville Asphalt Varnish Co. have built new works at a cost of \$16,000.

Nicholasville.—Iron ore has been found on the land of H. Crow and will probably be developed.

Pineville.—Bell county has appropriated \$25,000 for a new courthouse.

Powell County.—A saw mill is being erected by C. C. Eastin & Sons.

Riverton.—It is reported, but not confirmed, that the East Kentucky Railroad Co. will extend their road to Bristol Tenn.

Williamsburg.—A Baptist college is to be erected. R. C. Medaris can give particulars.

Winchester.—One or more propositions to build water works will shortly be made.

#### LOUISIANA.

Crowley.—The contract to build the jail, previously reported, has been let to J. J. Hannon at \$4,000.

Gretna.—H. P. Fournet will rebuild his large steam ginney, reported last week as burned; loss \$40,000.

New Orleans.—T. H. Sampson is purchasing machinery to establish a furniture factory.

New Orleans.—The large building recently reported to be erected by I. L. Lyon & Co. will be six stories, 44x109 feet, with an L 100 feet deep.

New Orleans.—The Southern Installment Manufacturing Co., capital stock \$50,000, has been chartered with Ernest Perkins, Elmer E. Perkins, Horace W. Allen, Charles A. Robinson and Samuel L. Berry as directors. Ernest Perkins is president. The company will manufacture silverware.

New Orleans.—The Pelican Brewing Co., capital stock \$100,000, has been incorporated with Albert Erath, Henry Albert, E. Vergnes, John Behrens and Fred D. Decker as directors. Will build a brewery on Villerie street.

Pattersonville.—Pharr & Williams will put in a band saw.

Plaquemine.—The Cypress Shingle & Lumber Co. will, it is reported, enlarge their mill.

#### MARYLAND.

Baltimore.—Mason R. Stone will erect 19 two-story buildings on Biddle street near Chester.

Baltimore.—W. R. Llewellyn will build 8 two-story houses on Biddle street and 16 two-story houses on Neura street near Chester.

Baltimore.—The Waterhouse Electric Co., lately reported as to be chartered, has a capital stock of \$250,000. The directors are Robert R. Zell, of New York; William R. Pope, Frank G. Waterhouse, Albert L. Gorter, Henry S. Zell and others.

Baltimore.—The John Ryan Co., capital stock \$50,000, has been formed to succeed John Ryan & Co. and operate their type foundry.

Baltimore.—Smith & Wilbur will build 10 two-story houses on Patapsco street near Clement.

Baltimore.—The contract to build a retaining wall along the Falls road from Maryland avenue to Boundary avenue has been let to Tracey & Nardin at \$12,680.63.

Baltimore.—J. A. McCreary & Co. will rebuild their lamp black factory reported in this issue as burned.

Easton.—Hubbard Bros. will erect a canning factory by next year. They have procured a site.

Hollins.—It is proposed to form the Caves & Worthington Valley Railroad Co. to extend the Green Spring branch of the Northern Central Railroad (office, Central Building, Baltimore).

Lonaconing.—Davin M. Evans will rebuild his saw mill near Lonaconing reported in this issue as burned.

Mechanicstown.—It is rumored that Daniel Miller & Co., of Baltimore, will start a large shirt factory.

Middletown.—The South Mountain Creamery Co. will erect a new building, two stories, 30x100 feet.

Ocean.—The Consolidation Coal Co. are driving a new slope to drain their mines, and are making other improvements.

Point of Rocks.—P. W. Mercer is building a grain elevator.

Snow Hill.—Messrs. Collins, Vincent and Purnell will erect an electric light plant at once.

Washington, D. C.—A. L. Case will erect 7 brick dwellings on R and Seventeenth streets, N. W., to cost \$33,000. E. Woltz will build 2 brick dwellings on C street, N. W., at a cost of \$10,000.

Washington, D. C.—The Belt Line Street Railroad Co. will run their cars by electricity as soon as permit from Congress can be secured.

Washington, D. C.—James K. Cleary, William A. Gordon and others have incorporated the Columbia Case Co., capital stock \$25,000.

Washington, D. C.—Washington McLean will erect a brick dwelling on I street and two brick dwellings on Fifteenth street, N. W. They will cost \$50,000.

Washington, D. C.—The Critic Publishing Co., capital stock \$100,000, has been incorporated by Halbert Kilbourn, W. F. Mattingly, Samuel Cross, A. T. Britton and others.

Washington, D. C.—L. P. Morton will erect a tenement house at H and Fifteenth streets to cost \$250,000.

Washington, D. C.—The Columbia Light, Power & Heat Co., capital stock \$200,000, has, it is said, been incorporated by W. C. Turner and C. M. Coon.

Washington, D. C.—Charles Heurich and others are organizing a stock company to build the large brewery, previously reported.

Washington, D. C.—J. H. Gordon will erect a \$10,500 brick dwelling at 3028 Q street, N. W.

Westminster.—J. F. Rinker contemplates forming a company to start a creamery.

#### MISSISSIPPI.

Bay St. Louis.—W. H. Hardy will build a \$7,000 hotel at Gulf Port, 3 miles from Bay St. Louis.

Meridian.—Dunn Bros., of Birmingham, Ala., previously reported as contracting to grade 56 miles of the Warrior Coal Fields Railroad, has let the contract for the cross ties to G. H. Howell, of Birmingham.

Vicksburg.—About \$30,000 have been secured towards organizing a company to erect a cotton factory.

Vicksburg.—The Hill City Electric Light Co. will probably enlarge their plant.

Vicksburg.—A company is being formed to erect a large fire-proof warehouse, 84x160 feet.

Vicksburg.—The Armour Packing Co., of Chicago, Ill., contemplate building a two-story brick warehouse, 60x100 feet, to cost about \$7,000.

#### NORTH CAROLINA.

Big Falls.—The Big Falls Cotton Mills, previously reported as to build a mill, have purchased machinery. J. V. Pomeroy is president, and J. H. Harden, secretary and treasurer.

Charlotte.—The Richmond & Danville Railroad Co. will shortly begin work on a new depot to cost \$15,000.

Cronley.—The Acme Manufacturing Co. will build a short railroad.

Durham.—The Enterprise Land & Trust Co., capital stock \$50,000, has been organized with John C. Angier, William M. Morgan, Samuel T. Morgan, W. B. Davie and William A. Guthrie as directors.

Edenton.—W. V. Elliott, of Lee's Mills, has been prospecting with a view to starting a machine shop.

Enochville.—S. M. Furr and others have been appointed a committee to negotiate for the rebuilding of the flouring and planing mill of Plaster & Lipe, lately mentioned as burned.

Fayetteville.—Trainor & Wire, of Philadelphia, Pa., are arranging to take the output of several saw mills, and will probably erect a planing mill.

Greenville.—T. M. Avery has bought the Mansion House and will improve it, put in elevators, electric lights, &c.

Henderson.—Plans and specifications have been prepared for the large tobacco warehouse reported last week to be built. It will be 100x200 feet.

Hickory.—Messrs. Campbell and Browder have received the contract to build the hotel previously reported.

Moore County.—The Tilden gold mine has been reopened.

Nash County.—A \$700,000 stock company has been organized to develop the Mann-Arrington gold mine. Will begin operations at once and will erect a 20-stamp mill. D. W. Lyon, of Raleigh, is secretary and treasurer.

Newberne.—Alexander Justice has purchased machinery to start a cracker factory.

Raleigh.—John C. Winder, president Durham & Northern Railway Co., will receive until November 1 proposals for grading and furnishing cross-ties and trestle timbers for 12 miles of road from Durham and 10 miles from Henderson.

Rockcut.—H. L. Kincaid has moved his lumber mill to Rockcut.

Salisbury.—The plant at the Concord mine is being rearranged.

Salisbury.—New pumps and hoisting machinery will be erected at the Barrington gold mine.

Salisbury.—Reed & Morgan are opening a gold mine.

Salem.—E. M. Light will rebuild his saw mill at Waughtown reported last week as burned.

Statesville.—An agricultural implement factory will be erected. J. P. Caldwell can probably give information.

Thomasville.—The Piedmont Reduction Co. will erect the electric light plant reported last week.

Tyra.—A stamp mill will shortly be erected at the Monroe gold mine near Tyra.

Winston.—It is stated that partial arrangements have been made for the building of an iron furnace near Winston. George W. Henshaw can give information if true.

Winston.—The Winston Land & Improvement Co. is being organized. George W. Henshaw can give information.

#### SOUTH CAROLINA.

Camden.—H. G. Carrison will rebuild his gin reported last week as burned.

Columbia.—L. J. Wagner, of Rome, Ga., will probably contract to increase the water supply of the city by sinking artesian wells.

Greenville.—Messrs. Collins and Brake, of Gainesville, Ga., have been prospecting with a view to establishing a shoe factory.

Greenville.—Dantzer & Mackey have purchased the furniture factory of R. M. Pickens & Son and will enlarge its capacity.

Jackson Station.—Jesse H. Bradley will rebuild his grist mill and gin reported in this issue as burned. Wants to purchase necessary machinery.

Marion.—The Elm City Iron Works have increased their capital stock and will double their capacity.

Spartanburg.—Messrs. Moffett, Hodgkins & Clarke, of Watertown, N. Y., previously reported as contracting to build water works, have, with Frank Watts and Francis S. Pecke, of Watertown, and Edwin A. Bursingame, of Providence, R. I., incorporated the Spartanburg Water Works Co., capital stock \$100,000.

Sumter.—J. Rytenburg & Sons will, it is reported, start brick works next spring.

#### TENNESSEE.

Athens.—The Athens Mining & Manufacturing Co. have accepted plans for their hotel previously reported.

Athens.—The Athens Mining & Manufacturing Co., previously reported as to build several factories, will probably begin work on a cotton factory first.

Athens.—Mr. Moore, of Ohio, will, it is reported, move his chair factory to Athens. The Athens Mining & Manufacturing Co. can give particulars if correct.

Athens.—The Athens Mining & Manufacturing Co. have awarded the contract for building the water works previously reported to Nashville parties.

Chattanooga.—M. C. Chambers will erect a three-story brick building on Ninth street to cost \$10,000.

Chattanooga.—The Lookout Ice Co. have asked for permit to erect a storage building with a capacity of 2,000 tons.

Chattanooga.—Proposals for building a twelve-room brick school building will be received until November 1 by H. Schwartz.

Chattanooga.—The county courthouse have ordered two iron bridges to be built at a cost of about \$1,100 each.

Chattanooga.—Henry O. Wayne, John F. Day and G. D. Howell, of Paducah, Ky., have purchased a site from W. K. Burton & Co. to erect 20 cottages.

Chattanooga.—F. H. Foster, of Cincinnati, O., is negotiating for the removal of his builders' hardware factory to Chattanooga, previously reported.

Cleveland.—There is talk of an electric light plant and a cigar factory being established. The mayor can give information when anything is done.

Columbia.—W. A. Settle, of Clarksville, and others are organizing a \$20,000 stock company to build an ice factory.

Erin.—Harris & Buquo will build an additional lime kiln.

Jackson.—M. P. Woody contemplates establishing a hub and spoke factory, and is now organizing a stock company.



Jackson.—The name of the \$100,000 stock company reported last week as to be formed to establish manufactories will be the Jackson Building & Manufacturing Association. W. P. Robertson is interested.

Knoxville.—E. B. Stone, of Wabash, Ind., has bought the furniture factory of William Caswell and will organize a stock company to enlarge it.

Loudon.—Hood & Robinson have started works to manufacture fire-proof bricks.

Memphis.—R. L. Cochran & Co., lately mentioned as making extensive improvements to their saw mill, are building a box factory and planing mill.

Nashville.—The Nashville Steel, Iron & Charcoal Co. have contracted with the Lawrence Iron Co., of Lawrence county, for ore for their two furnaces to be built at West Nashville.

Nashville.—B. Lanier and others have chartered the Southern Transfer & Storage Co.

Nashville.—The Nashville Roofing Co. has been incorporated by H. F. Watson, F. T. Reid, W. L. Watson, J. P. Prutzman, Thomas Foster and A. W. Shryer.

South Pittsburg.—T. M. Smiley & Co. have purchased the Dumwoody Mills and will make some improvements.

St. Joseph.—The Iron City Co., lately reported as organized to establish a manufacturing town near St. Joseph to be called Iron City, has been organized with J. T. Craik as president; H. G. Evans, vice-president; W. E. Bailey, secretary; George Childress, treasurer, and Thomas Sharp, manager. The company propose to build a hotel, one or more charcoal furnaces, etc.

Trundle's Cross Roads.—George N. Wade will rebuild his flour mill reported in this issue as burned, and wants information as to buhrs.

#### TEXAS.

Atlanta.—The Farmers' Alliance will build a flour mill at a cost of \$15,000.

Brenham.—Fisher & Weis have ordered machinery to rebuild their steam sausage factory reported in this issue as burned.

Corsicana.—Parties have been prospecting with a view to building an iron foundry. The mayor can probably give information if anything is done.

Dallas.—Parties have been corresponding with the mayor in regard to the establishment of a rolling mill and shot tower.

Dallas.—Henry Pollock will erect a two-story trunk factory, 50x100 feet, corner of Gibbs and Sumpter streets. The building will cost \$10,000.

Dallas.—Seth Miller and associates have asked for permit to erect an electric light plant.

Decatur.—It is rumored that the Fort Worth & Denver Railroad Co., (office, Fort Worth) are making the preliminary arrangements to build a railroad from Decatur to Dallas.

Denison.—It is reported that Munson Bros. will erect a three-story building to be used as a hotel.

Denton.—The Denton Mill & Elevator Co. have lately improved their mill.

Dexter.—James Marshall has put roller machinery in his flour mill.

El Paso.—W. M. Campbell, of St. Paul, Minn., has been prospecting with a view to establishing a foundry and machine shop.

Fort Worth.—The Catholics will erect a large brick school building.

Fort Worth.—C. C. Fitzgerald, of Brooklyn, N. Y., has made a proposition to lease the water works and complete them.

Gainesville.—Brady Bros. contemplate building a new and larger (flour) mill next spring.

Galveston.—The Texas Standard Oil Co. have nearly completed their works.

Galveston.—The committee on public property invite plans and specifications until November 19 for a city hall of the following dimensions: front 45 feet, three stories, to run back 140 feet, from thence two stories to extend 120 feet. The cost is not to exceed \$40,000.

Galveston.—E. Ketchum, W. H. Willes, G. B. Miller and Walter Gresham contemplate forming a \$100,000 stock company to furnish the city and private parties with dirt for filling up streets, &c. They will build a railroad if the company is formed.

Galveston.—The Galveston Soap & Manufacturing Co., capital stock \$100,000, has been incorporated by R. S. Willis, George Seally, J. M. Brown, B. Adoue, W. H. Willes, H. C. Lange and J. E. Wallace. The company will soon erect buildings.

Gonzales.—The city will erect a brick or stone school building to cost not more than \$10,000. E. Titcombe will give particulars.

Henrietta.—A stock company is reported to be organized to open coal mines. Thomas Holmden is interested.

Laredo.—St. Louis parties have asked for permit to erect an electric light plant. The mayor can give information.

Laredo.—A. C. McLane has asked for permit to build a street railroad.

Marble Falls.—A company has been organized to test certain beds of clay and if satisfactory will manufacture pottery, &c. J. J. M. Smith is manager.

Marshall.—The Marshall Street Railway Co. will at once extend their street railroad.

Marshall.—A. L. Herrick, of Bentonville, Ark., contemplates starting a pottery and jug factory. He is now testing clays.

Marysville.—It is reported that a mill to cost \$10,000 will be erected. A. G. M. Lay can probably give information, if true.

Pecos City.—M. D. Gee and Joseph Gibson will sink an artesian well near Pecos City.

San Antonio.—N. Mackey and James Smith have purchased about 2,300 acres of land 20 miles from San Antonio and near the San Antonio & Aransas Pass Railroad, and will start a brick-yard and pottery works.

San Antonio.—It is stated that William D. Bradt, of Jackson, Mich., contemplates erecting a paper mill.

Taylor.—It is rumored that the Missouri Pacific Railway Co. (office, St. Louis, Mo.) will build car works. They have lately bought 320 acres more of land.

Waco.—The contract for the plumbing of the Government building previously reported has been awarded to Manion & Co., of New Orleans, La., at \$3 490.

Waco.—The city will decide by a popular vote on November 4th whether or not to issue bonds to build water works, previously reported.

#### VIRGINIA.

Big Stone Gap.—The South Atlantic Coal Co. will, it is stated, build coke ovens.

Danville.—There is talk of starting a spoke and handle factory.

Fortress Monroe.—The contract for furnishing the National Soldiers' Home with steam heating apparatus has been awarded to Bartlett, Hayward & Co., of Baltimore, Md.

Halifax C. H.—J. M. Carrington and James Travers have received the contract for the trestle work of the first 10 miles of the Lynchburg & Durham Railroad.

Lynchburg.—Mrs. H. Moses will erect two three-story brick buildings on Fifth street and five on Church street.

Machipongo.—J. V. & Z. W. Dennis will rebuild next spring their saw and planing mill reported last week as burned. They will put the boilers and engine of the burned mill in their mill at Suffolk.

Norfolk.—The Suburban & City Railway & Improvement Co. will build an electrical street railroad if permit is granted.

Norfolk.—The Norfolk Southern Railroad Co. and the New York, Philadelphia & Norfolk Railroad Co. will build a wharf.

Norfolk.—A butter tray factory is projected.

Outlands.—Iron ore deposits on the property of George Carter are being opened up.

Pulaski City.—The Baptists will build a church.

Roanoke.—J. R. Johnson & Co., of Richmond, Va., will make a proposition to move their steam forge to Roanoke.

Roanoke.—The Virginia Packing Co. has been chartered to operate a can and canning factory with C. A. Moomaw as president. The capital stock is to be not less than \$25,000 nor more than \$100,000.

Upperville.—A creamery is to be started.

#### WEST VIRGINIA.

Belington.—George W. Curtin will erect a saw mill and build a boom for logs.

Charleston.—T. P. Hayes has asked for permit to lay pipes for furnishing natural gas for domestic and manufacturing purposes.

Glenwood.—It is reported that the Glenwood Tin Mining & Manufacturing Co. have commenced work on a smelting furnace.

Ronceverte.—The Catholics will build a church.

Thornton.—J. C. Painter & Bro., whose saw mill was reported last week as wrecked by an explosion, will rebuild.

Wellsburg.—The Gas City Oil & Gas Co. has been incorporated by John M. Cooper, J. C. Write, Charles R. Windsor, J. M. McCleary, John Reed, W. K. Brownlee and M. A. Jones. The capital stock is limited to \$100,000.

Weston.—Water works are being agitated.

Wheeling.—The Wheeling Electrical Co. are building a new light and power station. Have contracted for machinery.

#### BURNED.

Baltimore, Md.—The lamp black factory of J. A. McCreary & Co.; loss \$2,000. Will be rebuilt.

Brenham, Texas.—The wagon and blacksmith shop of August Lindeman; loss \$2,000.

Brenham, Texas.—The steam sausage factory of Fisher & Weis; loss \$3,000. Have ordered machinery to rebuild.

Callman County, Ala.—The mill of Messrs. Price.

Hopkinsville, Ky.—The flouring mill of F. L. Ellis & Co.; loss about \$60,000.

Huntsville, Ala.—The mill and gin of R. M. Thompson & Son, 8 miles from Huntsville; loss about \$10,000.

Jackson Station, S. C.—Jesse H. Bradley, whose gin was reported last week as burned, also lost a grist mill. He will rebuild.

Lewisville, Ark.—The grist mill and gin of Mr. Stricklin; loss \$2,000.

Little Rock, Ark.—The shingle mills of C. C. Loomis.

Little Rock, Ark.—The printing office of the Evening Democrat; loss \$25,000.

Livingston, Ala.—The steam mill and gin of T. E. Locard, and the mill and gin of Mr. Gully.

Lonaconing, Md.—The saw mill of David M. Evans near Lonaconing; loss \$1,500. Will be rebuilt.

Longstreet, Ga.—The saw mill of George W. Jordan, Jr.; loss \$1,000.

Mt. Crawford, Va.—The saw mill and sorghum factory of James Campbell on Naked creek.

Mt. Sterling, Ky.—The planing mill of J. W. Burton.

Petroleum, W. Va.—The oil works of S. Woodward.

Pulaski County, Ga.—The saw mill of Walker Jordan.

South Lake Weir, Fla.—The saw mill of Douglass & Pfann near South Lake Weir; loss \$4,000.

Texarkana, Texas.—The dry kiln of the Bowie Lumber Co.

Trundle's Cross Roads, Tenn.—The flour mill and carding machinery of George Wade; loss \$3,000. Will rebuild.

Wayland, Texas.—The mill and gin of J. A. Carroll; loss \$1,350.

The gins of G. Montjoy, Greenwood, Miss.; John S. Chapman, in Greenville county, S. C.; Thomas Evans, Columbus, Miss.; W. A. Warlick, Kynulga, Ala.; P. E. Wells, Columbus, Ga.; Norwood Smith, Prattville, Ala.; Mrs. Clara Smith, near Prattville, Ala.; Orion Alliance Gin, 3 miles from Foster, Texas; D. W. Adams, Little River Academy, N. C.; Wade W. Suber, Walton, S. C.; Woodson Gulley, Coatopa, Ala.; Mr. Lockard, 5 miles from Livingston, Ala.; (on) Brodie Plantation near Pine Bluff, Ark.; J. C. Weeks, Columbia, S. C.; Mr. Montgomery, 6 miles from Franklinton, N. C.; John C. Glendenning, Lincoln county, Ga.; H. T. Iveys, Winterville, Miss.; Mr. Scott, Beulah, (P. O. Riverton) Miss.; Thomas Atkins, near Poplar Bluff, Ark.; James Holcomb, 12 miles from Mountain View, Ark.; D. N. Hebron, 4 miles from Vicksburg, Miss.; C. F. Berry, Concordia, Miss.; G. W. Vannatta, near Shelbyville, Tenn.; Graham Bros., Grenada, Miss.; Milton Garroton, Garrett's Landing (P. O. Star City), Ark.; B. Ruscha, near Benton, Miss.; Mr. Dixon, Gay Hill, Texas; Tidwell & McCright, New Boston, Texas, and H. C. Dockery, Rockingham, N. C., have been burned.

SAMPIT, S. C., Oct. 18, 1887.

Editor Manufacturers' Record:

I have erected a saw mill, capacity 5,000 feet per day; cotton gin, 10 bales per day; grist mill, 200 barrels per day.

B. D. BOURNE.

#### To Build a Jail.

BENTONVILLE, ARK., Oct. 17, 1887.

Editor Manufacturers' Record:

We are going to build a jail very soon. Our county court made the levy and ordered it built.

JOHN BLACK.

#### Contracted to Build Railroad.

BIRMINGHAM, ALA., Oct. 17, 1887.

Editor Manufacturers' Record:

We closed contract on the 6th of this month for graduation cross ties and track laying for the 1st section of the Warrior Coal Fields Railroad, from Meridian, Miss., to Gainesville, Ala., 56½ miles, work to begin on the 16th. This road is to run from Meridian to Decatur, Ala.

DUNN BROS.

#### To Manufacture Brick and Tiles.

RALEIGH, N. C., Oct. 18, 1887.

Editor Manufacturers' Record:

The Raleigh Brick & Tile Manufacturing Co. was incorporated the 26th of August, 1887, for the purpose of manufacturing brick, tiles, &c. The company expect to put in machinery for that purpose. Capital stock \$5,000, with privilege to increase to \$20,000.

W. A. SINEHAN, Sec.

#### Glass Works to be Built.

CHATTANOOGA, TENN., Oct. 21, 1887.

Editor Manufacturers' Record:

The Hutchison Glass Works at Chattanooga are a sure fact. The company will be organized next week. Plans and specifications for buildings and machinery we expect to have ready by 1st of November.

R. C. HUTCHISON.

**MACHINERY WANTED.**

[If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, &c.]

**Bridge.**—Bids for building a bridge across Big Cypress creek will be received until November 7 by C. F. Winkler, Houston, Texas.

**Corn Mill Machinery.**—Jesse H. Bradley, Jackson Station, S. C., wants to buy machinery to rebuild his steam gin and grist mill.

**Iron Bridge.**—Messrs. Hope, Poole and McDoon will receive proposals for building an iron bridge 43 feet long.

**Iron Pipe.**—Proposals for 8,884 feet of cast iron water mains and connections, 8,380 feet of sewer mains and connections, and one iron tower, will be received until November 21 by J. W. Jacobs, assistant quartermaster United States, Atlanta, Ga.

**Laundry Machinery.**—Wikle & Wilkes, Cartersville, Ga., want bids on a 10 horsepower engine and machinery for a steam laundry.

**Machinery for a coffin factory** will be wanted by the Louisville Coffin Co., Louisville, Ky. They are building a new factory, to be completed next spring.

**The Natchitoches Street Railway Co.**, Natchitoches, La., want estimates for equipping about two miles of street railroad.

**New Florida Enterprises.**

MACCLENNY, FLA., Oct. 24, 1887.

*Editor Manufacturers' Record:*

We are forming a stock company here for the purpose of erecting and operating an ice factory and cold storage warehouse. The capital stock is \$25,000, which will be distributed in 1,000 shares of \$25 each. The capacity of the machinery we have is 10 tons of ice per day, without cold storage supply, or 5 tons with cold storage. We contemplate running a special line of refrigerator cars direct from Macclenny warehouses to New York, Chicago, Detroit, Louisville, Boston, Kansas City, Milwaukee, Philadelphia and St. Louis, carrying our fruits, vegetables, meats, butter and milk to the market centers direct. Our business will also include necessarily a large fruit-raising and shipping depot. We will embrace Baker, Clay, Bradford, Columbia and Nassau counties in North Florida, and Charlton, Ware, Wayne and Camden counties in Southern Georgia. We hope to make this one of the great enterprises of the South. A large saw mill has just been erected at Glen St. Mary, this (Baker) county, Florida. We have just erected a large cotton gin and compress here, which is in active operation day and night; cost \$10,000. A large new cigar factory has just been completed at Macclenny by F. A. Miller, a Philadelphia manufacturer, who proposes to manufacture cigars from exclusively Florida grown tobacco. He has made a few thousand, which are pronounced by old smokers fully equal to Cuban grown tobacco. EDWIN S. SHUEY.

**Electric Street Railroad Contemplated.**

PORTSMOUTH, VA., Oct. 25, 1887.

*Editor Manufacturers' Record:*

The Suburban & City Railway & Improvement Co. will build an electric street car road in Norfolk if the councils will grant it the right of way. I am managing director of the enterprise. WM. H. STEWART.

SHREVEPORT, LA., October 17, 1887.

*Editor Manufacturers' Record:*

The fine school referred to is only talked of. The city will most likely build 6 school houses, three for white and three for colored pupils. A. CURRIE.

**Erecting Saw Mill and Box Factory**

GRAYVILLE, IND., Oct. 24, 1887.

*Editor Manufacturers' Record:*

We are erecting a saw mill of 25,000 feet daily capacity, a planing mill and box factory at Winchester, Tenn. We will remove our machinery from this place in November, and hope to be running by the holidays. We will employ 75 hands. J. S. VAUGHN & Co.

**Will Build Stave Factory.**

WINCHESTER, TENN., Oct. 17, 1887.

*Editor Manufacturers' Record:*

I expect to build a tight barrel stave factory here. I want to have it running in about sixty days. Capacity from one and a-half to two million staves per year. A. WALTON.

**Will Rebuild Lampblack Factory.**

BALTIMORE, MD., Oct. 25, 1887.

*Editor Manufacturers' Record:*

Our loss is amply covered by insurance. We are again in part running order, and will certainly rebuild this fall if possible; if not, then in the spring. J. A. MCCREARY & Co.

**Doubling Capacity Oil Mill.**

MONTGOMERY, ALA., Oct. 23, 1887.

*Editor Manufacturers' Record:*

Our mill will be doubled in capacity, but all machinery and buildings are here, and it is only a matter of putting things together. SOUTHERN COTTON OIL CO. E. W. THOMPSON, MAN.

**A Woolen and Cotton Manufacturing Co.**

DEFUNIAK SPRINGS, FLA., Oct. 22, 1887.

*Editor Manufacturers' Record:*

The DeFunia Springs Woolen & Cotton Manufacturing Co., with a capital stock of \$25,000, was organized to-day. Hundreds of thousands of pounds of wool are produced in the vicinity; also thousands of bales of cotton. There is a good opening for other mills. C. C. BANFILL.

ATLANTA, GA., Oct. 24, 1887.

*Editor Manufacturers' Record:*

Mr. Sidney Root, superintendent, has contracted with Broomhead & Shut for the erection of the center and one wing of a brick and metal roof school building for Spelman Seminary to replace the wooden building burned last July. The cost is to be nearly \$10,000. When the whole building, with brick laundry and kitchen, is complete, the investment will be about \$20,000. S.

**Smelting Works Completed.**

THOMASVILLE, N. C., Oct. 20, 1887.

*Editor Manufacturers' Record:*

The Piedmont Reduction Co. are putting up smelting works—in fact, not are, but have them all up, and I shall expect to start up next week to run day and night, as we have plenty of work on hand now to last us for some time to come. Our building is 80x90 feet, and is supplied with roasting and water jacket furnaces, boiler capacity of 160 horse power, one 75 horse power and one 35 horse power engine, and shall have a capacity of 25 tons per day. We have also a zinc plant, 40x60, where we will treat the zinc which is in the ore separately. We also have a complete laboratory for assay, &c., and 10 houses for our men. Our product will be fine gold, silver, lead and zinc. We have a pole road of 12 miles to bring in the ore, and are making arrangement to light up with electric lights. C. F. CROSELMIRE, Superintendent.

**A Construction and Improvement Co.**

JACKSONVILLE, FLA., Oct. 21, 1887.

*Editor Manufacturers' Record:*

I have associated myself with Messrs. J. R. Tysen, of this city, and E. W. Henck, of Longwood, Fla., in the organization of the Florida Construction & Improvement Co. We organize under the general incorporation law of this State, and provide for constructing and operating railroads, &c., and as incidental thereto, buying leasing and selling real estate and transacting any other business. JAMES M. SCHUMACHER.

**Opening Granite Quarry.**

CONYERS, GA., Oct. 21, 1887.

*Editor Manufacturers' Record:*

We have organized the Conyers Gold & Granite Co. We are now at work opening a granite quarry and sinking a shaft for gold. We have fine prospects for gold, and our granite is excellent and supply abundant. We also have a mineral spring on our land supposed to contain iron and sulphur, and perhaps other ingredients. The supply of granite in our (Rockdale) county is simply inexhaustible, and several quarries are now being opened by private individuals. JAMES C. BARTON, Pres.

**Enlarging Machine Works.**

AUGUSTA, GA., Oct. 20, 1887.

*Editor Manufacturers' Record:*

We are building an addition to our works of brick, with metal roof; building will be 70x200 feet, and one 50x150 feet, and one two-story high, 30x60x70 feet, for store room and mill and engine supply department. We will add small vertical chucking and boring machine, pulley moulding plant, one buz planer, one sticking machine, one band saw, and 4½ inch cutting off and centering machine. We have put in 7 new machines this year; will put in a 60 inch boiler drill press and a suspension drill, making the most complete outfit with the tools we have in use of any shop South. We are doing an extensive mill, engine and gin supply business in connection with our works. G. R. LOMBARD & Co.

PARAGOULD, ARK., Oct. 18, 1887.

*Editor Manufacturers' Record:*

The Paragould & Buffalo Island Railway Co., 8 miles long, from Paragould eastward to east bank of St. Francis river, the line between Arkansas and Missouri; narrow gauge (3 feet), built for hauling lumber and cotton. It penetrates a section of country now isolated and rich in timber, cotton and corn products. It is proposed to extend sixteen miles beyond the St. Francis to the town of Cotton Plant, in Dunklin county, Mo., but for the present is only chartered under the laws of Arkansas to the Missouri line. Will be completed 8 miles by January 1st, 1888. Have now one engine and eight flat cars, which will for a while answer. Track laying will begin December 1st, 1887. Capital \$10,000, all paid up. A. BERTIG, Treas.

**New Stave Factory.**

LOUISVILLE, KY., Oct. 21, 1887.

*Editor Manufacturers' Record:*

We are having our new machine shops built and all the machinery put in. The building is 435x141 feet, two stories high. W. H. METZ & Co.

**Will Rebuild Mill.**

SALEM, N. C., Oct. 22, 1887.

*Editor Manufacturers' Record:*

I will rebuild saw mill at once. E. M. LIGHT.

**To Build a School.**

CHARLESTON, S. C., Oct. 19, 1887.

*Editor Manufacturers' Record:*

The commissioners of city public schools have accumulated from a small tax levied in previous years a sum of money for the erection of a new school house in the northwestern section of the city. An acre lot has already been purchased and paid for, and the new school house will have a capacity of 1,000 girls and boys.

NEW ORLEANS, LA., Oct. 21, 1887.

*Editor Manufacturers' Record:*

My ginny will be rebuilt. Am now making preparations to build immediately, if possible, to continue the business of this season. In case it be too late, shall do so for next season. H. P. FOURNET.

HUNTSVILLE, ALA., Oct. 20, 1887.

*Editor Manufacturers' Record:*

The North Alabama Improvement Co. will enlarge Monte Sano Hotel and build a number of cottages, so as to give them 200 more rooms at least. They will be ready for next season. A large and elegant ball-room and bowling alley, near the hotel, is nearing completion. The construction of a dummy line railroad from this city to the Hotel Monte Sano is also being seriously considered by this company, and will no doubt be built. BEN. P. HUNT.

**Ice Factory Contemplated.**

WALDO, FLA., October 20, 1887.

*Editor Manufacturers' Record:*

We contemplate erecting an ice factory and cold storage house at Florence, Ala. The matter will be settled positively next week. THE AMERICAN REFRIGERATOR & CONSTRUCTION CO.

**To Build a Canning Factory.**

EASTON, MD., October 21, 1887.

*Editor Manufacturers' Record:*

It is our intention to erect a canning factory in this place next spring. HUBBARD & BRO.

**Will Rebuild Saw and Planing Mill.**

MACHIPONGO, VA., October 21, 1887.

*Editor Manufacturers' Record:*

We will rebuild here in the spring. The boilers and engine that were in the fire will be put in mill at Suffolk, Va., at once. J. C. & Z. W. DENNIS.

RALEIGH, N. C., October 19, 1887.

*Editor Manufacturers' Record:*

We have put in new machinery for making candy. A. D. ROYSTER & BRO.

**Enlarging Carriage Factory.**

NASHVILLE, TENN., October 19, 1887.

*Editor Manufacturers' Record:*

I am enlarging my factory and building addition, 55x35 feet, three stories, of brick. GEO. W. W. SWEENEY.

**Electric Light Plant.**

BOWLING GREEN, KY., Oct. 19, 1887.

*Editor Manufacturers' Record:*

Our city has contracted with the Jenney Electric Light Co. for a plant. H. E. JENKINS.

**Building New Factory.**

LOUISVILLE, KY., October 19, 1887.

*Editor Manufacturers' Record:*

We are building a new factory to be completed in the spring, and will want some new machinery, &c.

LOUISVILLE COFFIN CO.



### Another Land and Improvement Company.

WATERLOO, ALA., October 18, 1887.

*Editor Manufacturers' Record:*

The Waterloo Land, Mining & Manufacturing Co. was organized 1st Saturday in October with George T. McWhorter as president; Hiram Richardson, vice-president, and O. P. Tucker, treasurer.

J. M. ALLEN, Secretary.

### Will Rebuild Saw Mill.

THORNTON, W. VA., October 10, 1887.

*Editor Manufacturers' Record:*

We intend to rebuild our saw mill soon.

J. C. PAINTER & BRO.

### Enlarging Factory.

SHELBYVILLE, TENN., Oct. 18, 1887.

*Editor Manufacturers' Record:*

We are enlarging our factory. Our wagon factory is in operation now, and planing mills will be in course of three weeks.

WILHOITE & SANDERS.

### Steam Laundry and Dye Works.

SHEFFIELD, ALA., October 18, 1887.

*Editor Manufacturers' Record:*

We are starting a steam laundry and dye works at Sheffield, and will be in operation as soon as building can be completed and machinery is in place.

MORRIS BROS. & CO.

BALTIMORE, MD., October 20, 1887.

*Editor Manufacturers' Record:*

The Tunis Lumber Co. has been incorporated with a capital of \$250,000, all of which will be full paid up. The new company will do a dressed lumber business. It will be a consolidation of Tunis, Eccles & Co., of North Carolina and E. L. Tunis & Co., of Baltimore.

E. L. TUNIS.

THE Standard Wagon Co., of Cincinnati, Ohio, with H. L. Atwater as manager of the Atlanta repository, made a most creditable display at the Atlanta Exposition of their fine workmanship, consisting of landaus, double and single carriages, buggies and phaetons. The Standard Wagon Co. cover the whole of the United States and Mexico with their sales. The Favorite Carriage Co., of Cincinnati, also made a most excellent exhibit of their goods in connection with the Standard Co., and in their own special house, beautifully designed and decorated by Major T. M. Barna, it was the especial attraction of all visitors at the exposition. Major Barna, the inventor of the cotton planter, and a man universally known throughout the entire South, had charge of the Standard Wagon Co's exhibit, and right royally did he dispense hospitality to all visitors. Major Barna is a gentleman of the old school, a man thoroughly alive to the necessities of the hour, polite, reliable and unquestionably a useful man to the South in the way of building up the old and wornout tissues, and supplanting the vacancies by useful methods and inventions. Geo. A. Burrows is the president of the Standard Wagon Co., and Edward S. Ebbert the president of the Favorite Carriage Co., with headquarters at Cincinnati, Ohio. These gentlemen did a wise thing in making an exhibit of their goods at the exposition, and were most fortunate in securing the services of Major Barna to represent them.

MR. R. H. EDMONDS, editor of the Baltimore MANUFACTURERS' RECORD, was at the Buford House, in this city, yesterday, on his way to the Atlanta Exposition. The MANUFACTURERS' RECORD is doing a splendid work for the South, and we deem it the best friend that the industrial and manufacturing interests of the Southern States can lay claim to.—Charlotte (N. C.) Chronicle.

### The R. & D. Railroad at the Piedmont Exposition.

One of the redeeming features of the Piedmont Exposition was the daily trains put on the road to the exposition buildings by the R. & D. R. R., which ran every fifteen minutes to and from the city. Had it not been for the able management and the conception beforehand of the impossibility of accommodating the crowds to the exposition, as outlined by E. B. Thomas, general manager of the R. & D. R. R., the mode of travel to and from the great fair would indeed have been very deplorable. It would have been an impossible matter to accommodate the thousands upon thousands of visitors who came hundreds of miles to see the exposition, had it not been for the great services rendered by the R. & D. R. R. In fact, the Piedmont Exposition owes to Mr. Thomas, as the representative head of the R. & D. R. R. system, a debt of gratitude which it can never pay in dollars and cents. The management of the R. & D. R. R. exposition train was one of the best regulated, most evenly devised and thoroughly equipped arrangements of the whole Piedmont Exposition.

A GOOD share of the cooerage notes which appear in the North-western Miller are stolen bodily from the Baltimore MANUFACTURERS' RECORD and then are copyrighted.—National Coopers' Journal, Buffalo, N. Y.

We thank our Buffalo contemporary for the implied compliment, but hope the case is not quite so bad as this.

### Southern Newspaper Enterprise.

The Daily Dispatch, of Montgomery, Ala., published October 20th a special edition of 32 pages. In addition to its usual quota of the world's news and an interesting assortment of miscellaneous matter, this issue of the Dispatch contained a summary of the history of Alabama from the time of its settlement to the present, a review of the State's mineral resources and sketches of every county in the State.

A copy of the entire 32 pages, printed in gold on satin, was presented to President and Mrs. Cleveland. The paper was formed into a roll and enclosed in a crimson plush case, in the center of which was a silver plate, on which were inscribed the words dedicating the edition to the President.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more.

## Information About THE South

THE marvelous mineral and timber wealth of the Southern States, their unrivalled capabilities as a manufacturing area, and the astonishing progress they are making in developing their natural resources and in utilizing their facilities for manufacture, are attracting the attention of the whole world. The extent of these resources and advantages is so fully and carefully set forth, and the progress of this development so faithfully chronicled from week to week in the MANUFACTURERS' RECORD, that it is now accepted everywhere as unquestioned authority on Southern affairs, and its statistics and statements are drawn upon by almost every writer or speaker on any Southern topic.

Its weekly issues constitute an authentic history of the industrial progress of the Southern States. It furnishes every week a vast variety of information on Southern affairs that can be gained from no other source. It discusses in its editorial columns and in its correspondence every topic of Southern interest. It presents the resources and development of the South in all their phases. To all who are in any way interested or concerned in the prosperity of the South, or who care to keep posted as to the industrial and commercial progress of that section, the MANUFACTURERS' RECORD is indispensable.

Manufacturers and others desiring to locate in the South, will find the MANUFACTURERS' RECORD invaluable. In every issue there are many offers from Southern towns and land companies offering free sites and financial aid to those who will establish new manufactures, or remove their plants from the North to the South. There are hundreds of openings throughout the South for factories of all kinds, foundries and machine shops, brick yards, agricultural implement works, handle factories, all classes of wood-working establishments, &c. If you desire to know what the South is doing, and what opportunities it offers for success in every line of industry, great and small, read the MANUFACTURERS' RECORD.

As the leading industrial paper of the South, the MANUFACTURERS' RECORD covers that entire section, and is closely read by manufacturers of all classes, mining operators, builders and contractors of railroads, water works, mills of all kinds, &c., merchants, capitalists and business men generally. It is undoubtedly the best advertising medium in existence through which to reach the rapidly developing manufacturing and mining interests of the fourteen Southern States. It is the most widely quoted and highly commended industrial journal in America. It is live, active and progressive, and is the recognized authority throughout the country upon the growth of the South.

Never before in the history of the South were the prospects so brilliant for a wonderful activity in all manufacturing, mining and railroad interests. Moreover, the abundant crops ensure great prosperity to the farmers. More machinery, and supplies for cotton and woolen mills, wood-working establishments of all kinds, iron works, railroads, mines, &c., will be purchased by the South during the next twelve months than ever before in the same length of time; and those who desire to secure a share of this trade, will find that an advertisement in the MANUFACTURERS' RECORD will prove a profitable investment, as it will bring their machinery directly before buyers in all parts of the South.

Sample copies and advertising rates mailed on application.

Published by the MANUFACTURERS' RECORD CO.

SUBSCRIPTION \$3.00 A YEAR.

BALTIMORE, MD.



**Cotton Mill Wanted.**

CULLMAN, ALA., Oct. 18, 1887.  
*Editor Manufacturers' Record:*

We would be pleased to correspond with some capitalist or company with experience and capital, relative to the erection of a cotton factory at this point. The town is on an elevated point unsurpassed for health, water in abundance, cheap living, excellent church and educational facilities, and an ample supply of cotton raised in the adjacent country to run factory all the time. We will donate the site and take a liberal share of the stock. Any information desired will be cheerfully given.

PARKER & BROWN.

**Erecting a Lumber Mill.**

BLUFF CITY, TENN., Oct. 21, 1887.  
*Editor Manufacturers' Record:*

We have formed a stock company of \$50,000 cash capital, and are putting in our mill at Bluff City, Tenn., and our improvements are quite well advanced. The mill is one of Stearns Manufacturing Co's latest and best make. We have a supply of timber for about 15 years' cutting, principally of white pine and yellow poplar of good quality. We expect to commence cutting about January 1, 1888. The officers of the company are: Hugh W. Dyar, of Detroit, Mich., president; Alson F. Willey, Grand Rapids, Mich., treasurer and manager, and Harry C. Angell, secretary.

THE WILLEY BOOM & LUMBER CO.,  
A. F. WILLEY, Man.

**Will Rebuild Flour Mill.**

TRUNDLE'S CROSS ROADS, TENN.,  
Oct. 24, 1887.

*Editor Manufacturers' Record:*

My mill was burned, and I desire to rebuild at once. I want information about burrs.

G. N. WADE.

**Rebuilding Lumber Mill**

GREENVILLE, ALA., Oct. 23, 1887.  
*Editor Manufacturers' Record:*

We will rebuild at once; in fact, we are well under way now and hope at an early day to be ready for business, with larger and better equipment than we had before.

FLOWERS & PEAGLER.

WHEELING, W. VA., Oct. 24, 1887.

*Editor Manufacturers' Record:*

We are building a new light and power station, and have contracted for all machinery needed.

THE WHEELING ELECTRICAL CO.

GONZALES, TEXAS, Oct. 17, 1887.

*Editor Manufacturers' Record:*

The city of Gonzales will build a high school building of a seating capacity for 500 students, not to cost exceeding \$10,000. To be of brick or stone. Address, Ed. Titcombe, city secretary.

L. H. PLANCK.

**Will Rebuild Grist Mill.**

JACKSON STATION, S. C., Oct. 21, 1887.

*Editor Manufacturers' Record:*

My steam gin and grist mill was burned on the 5th inst. I intend to rebuild; work to commence at an early date; capacity same as formerly, if not greater. As I shall have to purchase a complete outfit, gins, feeders, condensers, press, millstones, engine, etc., I want circulars and prices from manufacturers.

JESSE H. BRADLEY.

**Additional Machinery.**

WEST POINT, GA., October 22, 1887.

*Editor Manufacturers' Record:*

The Rosedale Manufacturing Co., with business office here, has recently added new machinery—84 looms and 5,000 spindles.

R.

**Will Enlarge Iron Works.**

MARION, S. C., October 20, 1887.  
*Editor Manufacturers' Record:*

The capital stock of the Elm City Iron Works at this place has been largely increased and their capacity will be doubled. Agricultural machinery of all kinds, engines, &c., will be manufactured.

X. Y. Z.

**Building Box Factory and Planing Mill.**

MEMPHIS, TENN., October 18, 1887.  
*Editor Manufacturers' Record:*

We are building a first-class box factory and planing mill, and contemplate putting in all the latest improved machinery.

R. L. COCHRAN & CO.

**Electric Light Machinery.**

COLUMBIA, TENN., October 19, 1887.

*Editor Manufacturers' Record:*

We have recently put in our mill a 125 16 candle-power Jenney electric light plant, made at Fort Wayne, Ind. This is an incandescent light.

COLUMBIA COTTON MILL CO.

**Brick Works.**

LOUDON, TENN., October 20, 1887.

*Editor Manufacturers' Record:*

We have started works for the purpose of manufacturing fire-proof brick.

HOOD & ROBINSON.

C. R. MAKEPEACE & CO.  
ARCHITECTS and MILL ENGINEERS  
PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

**WANTED**

MAN to take charge of practical department of Large Wood Working Establishment. Business firmly established. Goods sold all over the South. Brains, Energy and Experience essential. Some money desirable. Good chance for right man.

G. C. TERRY, Nashville, Tenn.

**FOR SALE!**

Machine Works and Foundry Business.

Well established and growing, and located in the most desirable section of the South. Excellent opportunity for practical man with some capital.

Address NORTH GEORGIA,  
CARE MANUFACTURERS' RECORD.

**IMPORTANT  
To Wharf Owners.**

THE PATENT PILING PROTECTOR CO., BRUNSWICK, GA., is prepared to protect piling from the Teredo and other Marine Pests in any Harbor in the United States, and will erect its plant, which is inexpensive, in any Harbor where a contract is offered, and prepare piling from the timber near at hand. The process is thoroughly effective, indestructible in salt water, and protection for ten years guaranteed. Is fully protected by letters patent. Has been tested for six years; is better than metal covering; as good and for piling in some respects better than creosoting; costs less than one-half as much as metal covering or creosoting. Circulars fully explaining process will be sent upon application. Correspondence solicited.

Address,  
C. P. GOODYEAR, President,  
BRUNSWICK, GEORGIA

**STEEL RAILS**

Loggins, Mining and Plantation

RAIL AND TRAM ROADS.

Light Sections Rails and Spikes in stock. Locomotives, Logging Cars, etc.

NEW AND SECOND HAND.

HUMPHREYS & SAYCE,

OFFICE NO. 1 BROADWAY, N. Y.

**MORRISTOWN,  
The Metropolis of Upper East Tennessee.****IN BRIEF:**

It has a population of 3,500—incorporated. It has more than doubled its population since 1880.

It has the finest courthouse and opera house in Upper East Tennessee.

It is the center of the richest and most extensive agricultural district in the State.

It has an elevation of 1,400 feet, and affords mountain views of surpassing beauty.

It has five commodious brick church edifices and two good brick school buildings.

It does the largest retail and wholesale business of any city in Upper East Tennessee.

It offers more and better opportunities for paying business enterprises than any city in the South.

It has hundreds of thousands of acres of unexcelled forests of merchantable timbers accessible to it.

It has the finest climate in the world, an abundance of pure spring water, and is noted for its healthfulness.

It is building more business houses and private residences in proportion to its population than any city in the State.

It is surrounded with iron and zinc mines and quarries of gray and variegated marbles of incalculable extent and value.

Its land companies and building association place desirable homes within reach of men of small means as well as large.

It is the commercial, manufacturing and railway center of Upper East Tennessee, having immediately tributary to it nine of the wealthiest counties in East Tennessee and a large part of Western North Carolina.

It has railroad facilities equal to those of any point between Chattanooga and Lynchburg, and they will be increased in the next eighteen months by the building of the short line to the coal fields at Cumberland Gap.

It has a citizenship composed almost exclusively of native-born Americans, large numbers of whom are recent emigrants from New York, Connecticut, Pennsylvania, Ohio, Virginia, Indiana, Wisconsin and other States.

It has two banking institutions, extensive stove works, a manufactory of agricultural implements, a large tannery, three lumber mills, the largest commercial flouring mill in East Tennessee, two marble works, a carriage and wagon factory, and many industrial establishments of lesser note.

ROBERT L. CANT,  
President Business Men's Association.

**Farm, Mineral  
AND  
Timber Lands.**

Parties desiring to obtain **Fine City Property** in a growing manufacturing center, and **Truck Farms** of superior excellence in close proximity to the markets of the country, and **Mineral and Timber Lands** of great value, will do well to consult Messrs. A. B. Whiteaker & Co., of Bristol, Tenn. The **Mineral and Timber Lands** controlled by us are within a radius of fifty miles of Bristol, and are pronounced by experts to be the most valuable in the sections of East Tennessee and Southwest Virginia. The **Timber Lands** are of virgin growth and in close proximity to the railroads. The **Mineral Lands** are the richest in this section of the South. **Capitalists and Prospective Settlers**, as well as **Home Seekers**, will do well to consult us regarding our lands, which we offer at the most reasonable prices. We will be glad to furnish any or all kinds of information regarding lands in this section of the State. Address

A. B. WHITEAKER & CO.  
BRISTOL, TENN.

**FOR SALE.**

400,000,000 feet Timber

150,000,000 feet White Pine.

30,000,000 feet Poplar.

200,000,000 feet Hemlock.

10,000,000 feet White Oak.

Ten miles from railroad to be completed in twelve months.

E. B. MOON, Bristol, Tenn.

D. W. K. PEACOCK,  
Real Estate Agent,

CARTERSVILLE, GA.

Minerals a Specialty.  
Refers to THE HOWARD BANK, Cartersville, Ga.  
J. W. RANKIN, Atlanta, Ga.

**The Old South and the New  
1867-1887.**

A SERIES OF LETTERS TO THE "MANUFACTURERS' RECORD" RECORDING THE OBSERVATIONS MADE IN TWO JOURNEYS THROUGH THE SOUTHERN STATES, WITH SPECIAL REFERENCE TO INDUSTRIAL AND COMMERCIAL CONDITIONS AND CHANGES.

BY

WILLIAM D. KELLEY, M.C.

"This volume is the result of an earnest desire on the part of its author to understand the industrial and social condition of the people of the Southern States. The better to gratify this desire, he revisited in 1887 substantially the field he had traversed in 1867. A few days sufficed to convince him that to chronicle his observations with photographic fidelity, and to report them, with his conclusions therefrom, to his countrymen at large, might prove to be a fitting close to the labors of a long life which has been devoted chiefly to the investigation of social and politico-economic questions."—*Author's Preface.*

IN THE QUESTIONS OF THE DAY  
SERIES, No. 44.

12mo, Cloth, \$1.25.

G. P. PUTNAM'S SONS,

27 & 29 W. 23d Street, New York.

27 King William St., Strand, London.

**Iron and Steel  
Manufacturing.**

The advertiser wishes to enlist parties who desire to engage in manufacturing with the view of erecting a plant equal to any in the country. Can offer location where building can be done cheaply. A number of leading railroads for collecting and distributing materials and stock at best rates are available. Cheap coal, and fuel gas can be furnished at five cents per thousand feet, and with a complete organization under a perpetual charter, with privileges unlimited as to use of capital in manufacturing and mining, and all necessary and proper advantages for the association of capital at any desirable point. Or, if a better location could be found, the advertiser would make the organization available at such a point, or where parties are already manufacturing or mining and wish to extend their business. Address

IRON & STEEL MANUFACTURER,  
CARE MANUFACTURERS' RECORD,  
Baltimore, Md.

**COPY OF ORDINANCE**

Passed by the Council of the Town of West Point, Virginia, on the 21st day of April, 1879, and re-enacted and approved on the 22d day of March, 1887.

Be it ordained by the Council of the Town of West Point, Va., that any party or parties investing in property in this town for the purpose of conducting any enterprise, such as manufactories, packing houses, &c., and actually operating the same, they shall be exempt from all corporation taxes upon such property, and all machinery and improvements thereon, for the term of ten years from the purchase of such property.

It is also ordered that the Mayor is hereby instructed to advertise this ordinance in the "MANUFACTURERS' RECORD," a paper published in the City of Baltimore, Md.

E. WILKINSON, Mayor.

**\*For Sale.\***

A 100 horse-power Stationary Engine and two Stationary Boilers, together with fronts, grates, castings and trimmings. Said Engine and Boilers have been used, but have been thoroughly rebuilt, and are in A No. 1 order, and will be sold very low; or can attach a Mammoth Saw Mill and sell all low, and take part in good yellow pine lumber. Apply to

RICHMOND MACHINE WORKS.

RICHMOND, IND.



# DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH. 

AS A CITY OF

## Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last four months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS.  
The Louisville & Nashville Railway Car Works. Cost of Buildings, \$300,000.

Charcoal Company's plant, costing \$120,000.  
A seventy-ton Charcoal Iron Furnace, costing \$190,000.  
A one hundred-ton Blast Iron Furnace, costing \$225,000.  
The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.  
The American Oak Extract Company's plant, costing \$60,000.  
Ivens & Sons Steam Boiler and Engine Works, costing \$100,000.  
Morse Cotton Compress plant, costing \$60,000.  
Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.  
Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.  
The Decatur Street Railway Company.  
The Telephone Company.  
Brush Electric Light Company, cost \$10,000.  
The Ironton Wheelbarrow Company, cost \$25,000.  
Howland & Co's Water Works System, costing \$200,000.  
Bleymeyer Artificial Ice Company, cost \$10,000.  
Four Mammoth Brickyards.  
Jones, Poley & Co's Lumber Yards.  
The Hoosier Mills & Building Company.  
The Gate City Sash & Door Company.

Arantz Bro's Mills and Lumber Yards.  
Grant & Co's Furniture Factory.  
Southern Lumber Company.  
H. S. Freeman's Mills and Lumber Yards.  
The Alabama Farmer's Friend Fence Machine Company.  
The Decatur Artificial Stone Company.  
Decatur Chain and Architectural Iron Works, capital \$100,000.  
Natural Gas Company, capital \$200,000.  
First National Bank, capital \$100,000.  
The Exchange Bank of Decatur, capital \$100,000.  
Merchants' Insurance Company, capital \$100,000.  
Decatur Building Association, capital \$300,000.  
Decatur Building Company, capital \$1,000,000.  
Buchheit's Bottling Works.  
Decatur Printing Company.  
Two daily papers, three weekly papers.  
Two hotels are building—one \$60,000, one \$300,000; the largest in the South.  
Grand Opera House, \$100,000.

THERE ARE OTHER

## Mammoth Enterprises

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

## Decatur Land, Improvement & Furnace Company.

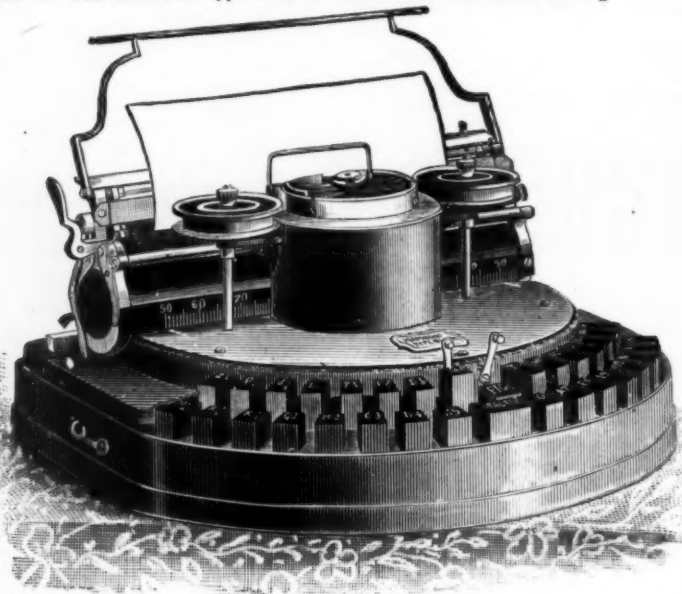
E. C. GORDON, President    H. G. BOND, Vice-Prest. and Gen. Manager.    W. E. FOREST, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

### The Hammond Type Writer.

The use of type-writing machines is becoming as general as that of the copying-press, or any other of the labor saving devices essential to a well-equipped counting room. No office nowadays is complete in its outfit without a type writer. There are machines of several makes in use, but only three that have attained any prominence, or are widely used. Of these the latest to come before the public is the Hammond, an illustration of which is herewith presented. The Hammond type writer is



THE HAMMOND TYPE WRITER.

the result of years of inventive effort and embodies such improvements as were suggested by the study and use of the writing machines in existence prior to its introduction.

The keyboard of the Hammond is similar to that of a piano, there being two rows of ebony keys. With only 30 keys 90 characters can be printed. Instead of the type being on a series of levers, as in the type bar machines, they are all arranged on two segments of a wheel termed a type wheel. This type wheel is brought to the printing position by the action of the key levers, an impression hammer pressing the paper against the type on the wheel. Each type wheel carries three rows of characters, the upper row representing small or lower case letters, the middle row capital letters and the third row figures, fractions and other useful characters. Ordinarily lower case letters are printed, but when capital letters are desired a shift key is used, which elevates the type wheel and brings the middle row of letters to the printing position. This shift key can be operated simultaneously with any of the other keys. A second shift key brings the third row of the type wheel into proper position to print figures, fractions and other characters of more or less frequent occurrence. The hammer stroke of the Hammond is automatic, thus making the impression uniform, no matter whether the keys are struck lightly or forcibly. The machine can write a line 9 inches long, and, as its carriage ends are open, it can take paper of any width. The striking of two keys simultaneously cannot harm the machine, and will give but one impression. The machine is light and portable, weighing with case and cover only 18 pounds.

The Hammond type writer received at the New Orleans Exposition, 1885, the only gold medal awarded to type writers.

The company's machines are now to be found nearly everywhere, several thousand being in daily use among business men, lawyers, railroad and insurance companies, teachers, etc., which are giving entire satisfaction, and the numerous and excellent testimonials to be found in their pamphlet year out this statement.

The main office of the Hammond Type Writer Co. is at 77 Nassau street, New York. Their Maryland business is in the hands of Mr. J. H. Wilson Marriott, whose office is at the corner of Charles and Fayette streets, Baltimore.

### Commercial Depravity.

To the thoughtful student of our modern business life, as well as to the practical philosopher, the frequency of cases of embezzlement, breach of trust, defalcation and kindred other crimes is startling.

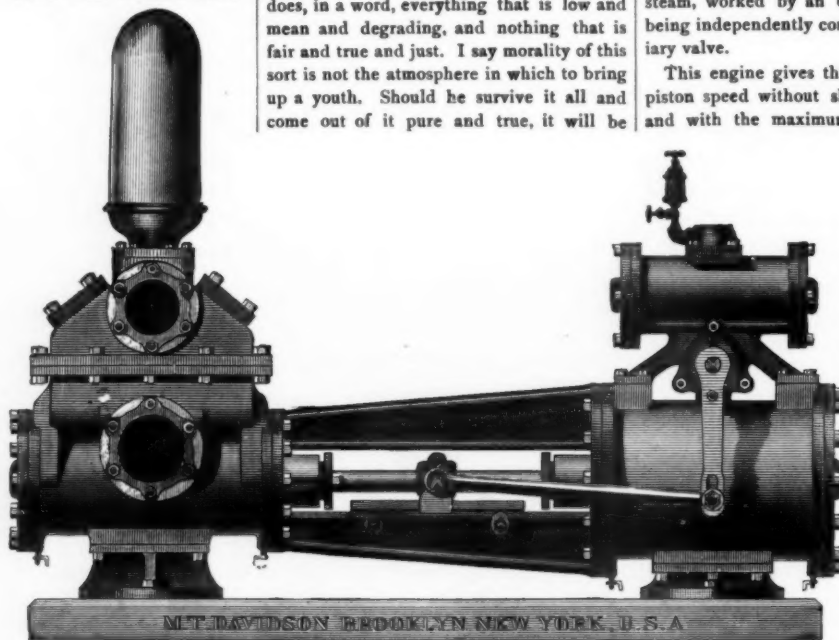
should be, first of all, an honest man? And yet, how many of you ever take the trouble to inquire into this matter at all, or even to accompany your sons upon the occasion of their first interview with the employer?

I firmly believe that more than one-half of the defalcations and breaches of trust among clerks are caused by the silent teachings of dishonest merchants. I do not mean to excuse the clerks who permit themselves to be influenced by such teachings, but I wish to put the first blame where it belongs—and, in meting out punishment to the offenders, ideal justice would consign them both to the penitentiary.

Some time ago a case like this occurred: A clerk was instructed by his employer to render an account of sales for goods sold on commission at a price less than that at which they had actually been sold. With rare courage, he refused to do it, and consulted a certain millionaire as to what was his duty under the circumstances. Mark the result as an evidence of the present low tone of business morals: The millionaire told him he was wrong, and that he should not criticize the morals of his employer, but obey orders! Fortunately, in this instance, the young man's conscience was stronger than his fear of a millionaire's disapprobation, and he gave up his position. The employer's comment was that "he was too good for this world."

Many similar things militate against the moral growth of the young clerk. Everybody must deplore the morality that permits false weights and false prices; that puts a "three-pound" label on a forty-two-ounce package; that sells fifty per cent. of spoiled flour and worse than spoiled buckwheat as "pure" mustard and "pure" pepper; that laughs at the sharp trick of false weights inserted in bills of lading to defraud the railroad and steamship companies; that applauds the successful bribery of a custom-house examiner of dutiable goods; that chuckles at the clever imitation of a competitor's trade-mark; that twists and turns and prevaricates to avoid the payment of taxes justly due the Commonwealth for its blessings of liberty and protection; that does, in a word, everything that is low and mean and degrading, and nothing that is fair and true and just. I say morality of this sort is not the atmosphere in which to bring up a youth. Should he survive it all and come out of it pure and true, it will be

A very large majority of the office-boys in the business houses of this country enter upon their career between the ages of fourteen and seventeen years. These positions are generally obtained by watching the "want" columns of the newspapers and answering the advertisements therein. Usually the applicant is required to live with his parents and "come well recommended."



M. T. DAVIDSON BROOKLYN NEW YORK, U.S.A.

WATER WORKS PUMPING ENGINE.

### The M. T. Davidson Water Works Pumping Engine.

We illustrate on this page a non-condensing pumping engine manufactured by the M. T. Davidson Steam Pump Co., Brooklyn, N. Y. The peculiarity of this pumping engine is the steam end; unlike other direct-acting steam pumping engines it has only one valve in the steam chest. This may properly be called a compound slide-valve with cylindrical face. It performs two duties, that of the ordinary slide-valve and of the auxiliary valve combined. Its duty as a slide-valve is, of course, to reciprocate across the steam ports, to admit steam alternately to the two ends of steam cylinder, and, as an auxiliary valve, it is oscillated so as to open and close the steam ports that lead to the ends of the steam chest. The steam chest is cylindrical and bored out to make a face for the slide-valve, and to receive the pistons that assist in operating the valve. The pistons are connected together, sufficient space being allowed between them for the valve and steam ports, and they are also connected to the slide-valve, all working in the same plane and being of same diameter, thereby insuring evenness of wear and readiness of access for adjustment and repairs. An examination of the valve at once suggests the impossibility of its getting out of order, becoming deranged or wearing out within the life of any other portion of the pump. The valve is oscillated by an oblique cam, connected with the valve by a steel pin passing through the valve into the exhaust port, in which the cam is placed. The moving of the valve does not depend entirely upon the steam admitted to the end of the valve piston, for should that not be quick enough to operate on the valve, with the pump under a high rate of speed, the cam is so constructed that it will carry the valve mechanically, and thus prevent the piston from striking the cylinder heads in any case. This is claimed as one of the most important features of this engine, the valve being as much under the control of the piston rod as is the valve of the ordinary steam, worked by an eccentric, instead of being independently controlled by an auxiliary valve.

This engine gives the highest attainable piston speed without shock or concussion, and with the maximum of efficiency and

But, did it ever occur to you that this is a very one-sided affair? If your boy can furnish the highest credentials of his character and fitness for the position, why, pray, would it be so very absurd to ask the merchant who is to employ him to produce his certificate of character also?

Herein lies one great secret of the cause of fraud and defalcation in the business community, namely: the dishonesty of employers. In starting your son upon his career, do you not consider it a matter of transcendent importance that his employer

because he has within him the mettle of a true man, and not because of his surroundings.

Parents must, therefore, exercise greater care in launching their sons upon the tempestuous sea of business life, or shoulder the blame for the consequent shipwreck.—The Epoch.

**If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.**

economy. Its capacity is 2,000,000 gallons in 24 hours, working at medium speed. It is very simple in construction, effective in action and extremely durable. It has been spoken of in the most flattering terms by government officials, cities, towns, villages and corporations, who readily endorse it for its special duty. Every pump and pumping engine manufactured by the M. T. Davidson Steam Pump Co. is of the best material and workmanship, and fully tested at their works, at greatest required speed and pressure, before shipment.



## TRADE NOTES.

**THE Jeffrey Manufacturing Co.**, of Columbus, O., having lately gotten control of the Hey & Oborn patents, beg leave to announce to the public that they are now ready to supply the market in several numbers and strengths of the Hey-Oborn detachable chain, and will be able to supply all sizes in a short time. Parties wishing to place orders for chain belting will do well to ask the Jeffrey Manufacturing Co. for samples and special circulars.

**THE Globe Iron Roofing & Corrugating Co.**, of Cincinnati, Ohio, have just completed covering the United States Government Quartermaster's Depot at Jeffersonville, Ind., with their Globe standard standing seam iron roofing. The iron was No. 24 gauge, weighing one pound to the square foot, and it required over one hundred tons of iron. The Globe Company claim that this is the largest continuous iron roof on one building in the United States, as the roof is 3,200 feet long, considerably over half a mile, and the same was formerly covered with slate. The government officers at the depot were so pleased with the job that they gave the Globe Co. several very highly complimentary testimonials regarding the material furnished and work done.

**THE Davin Machinery Co.**, Walter W. Davin, manager, have just sold to the Gate City Lumber & Manufacturing Co., of Gate City, Ala., a 50 horse-power engine, with 60 horse-power boiler, planers and matchers, moulding machines, re-saws, etc., etc.

**WM. STEVENSON** the representative for Messrs. F. A. Leigh & Co., Boston, (agents for the Platt revolving flat carding engine and other specialties in cotton machinery) is at present in the South introducing the merits of the new system to the notice of the cotton manufacturers, which has been so largely adopted in the best mills of New England during the past three years. It is claimed for the cards that they save floor space, save waste and wages, and produce from 600 to 1,000 pounds per week of carded cotton equal to double carding. Mr. Stevenson is very hopeful that they will soon be introduced into some of the new Southern mills, and will effect a marked improvement in the quality of the goods as well as profit to those using them. In England they have been in successful use for 20 years and increasing yearly in favor.

**THE commissioners of the Huntingdon Asylum**, of Huntingdon, Pa., after fully investigating the merits of different engines with a view to getting the best power for their institution, have decided upon the Ball automatic cut-off engine, built by the Ball Engine Co., of Erie, Pa., and have specified this engine in their call for estimates. This is very flattering, and the Ball Engine Co. has reason to congratulate itself in having its engines singled out from among the numerous manufactures in this country.

**THE Brush Electric Light Co.**, of Baltimore, Md., is increasing its plant, and has just ordered another Ball engine from the Ball Engine Co., of Erie, Pa., through their agents, Messrs. Crook & Horner, of that place.

**THE Davidson Steam Pump Co.**, Brooklyn, N. Y., have just issued a new catalogue for 1887. It contains many facts of importance and interest to steam users, interspersed with finely executed illustrations of the improved steam pumps, pumping engines and hydraulic machinery manufactured by this firm. Manufacturers and others contemplating the purchase of power pumps and pumping machinery for any service should send for this catalogue. Address the Davidson Steam Pump Co., 77 Liberty street, New York.

**ASBESTOS THEATER CURTAINS.**—The new Broadway Theater in New York, Academy of Music, Buffalo, and Vendome Theater, Nashville, Tenn., have contracted with the Chalmers-Spence Co., of the first-named city, for asbestos drop curtains, with a view to protecting the auditorium from destruction in case of a conflagration occurring on the stage. It is well known that asbestos is practically non-combustible and a curtain made of it that can be instantly dropped will secure absolute safety in such cases.

**THE Stevens Filter Co.**, of Toledo, Ohio, are making a specialty of building large or odd-sized filters, for hotels and private residences to set in a niche in the wall or in a corner. They are all constructed on the same principle as the celebrated upright filter, and can be cleaned by merely reversing the supply pipe. The sale of these filters is rapidly increasing, and they are being shipped daily to nearly every part of the world. Parties building new and modern homes or hotels should correspond with the Stevens Filter Co. and receive plans and prices on special filters and coolers.

**THE safe works of the Corliss Manufacturing Co.**, Providence, R. I., are running night and day to fill orders for their new safes, which are being constructed on an entirely new system, radically different from anything hitherto made, and which promises to revolutionize the business. They are making two for the Safe Deposit Co., of Dayton, O.; two for the Plankinton National Bank, of Milwaukee, and have received orders from the First National Bank, of Minneapolis; the First National Bank, of St. Paul; the Waukesha National Bank; the National Bank of Ashland, Wis.; Manufacturers' National Bank, of Racine, etc. The United States Bank, of Omaha, have adopted their complete system, which embraces fire-proof vaults and burglar-proof safes.

ON another page will be found the advertisement of the Alpine Safe Co., Cincinnati, Ohio. The prices of their fire-proof safes are astonishingly low, and any one needing a safe should investigate the merits of these before purchasing.

ONE of the neatest catalogues of the season is that just issued by the Joseph Bell Stove Co., Wheeling, W. Va. It contains illustrated descriptions and prices of the stoves made by this company for all purposes, and dealers should send for a copy.

**THE Empire Lumber Co.**, who own several fine saw mills, including "the Nickel Plate Mill" at Empire, Ga., with a daily capacity of 250,000 feet of yellow pine lumber and the Empire Mill, Seddon, Ala., with a capacity of 125,000 feet per day are out with a handsomely engraved circular announcing the opening of their new mills, which are equipped with all the latest improved saw mill machinery furnished by the Stearns Manufacturing Co., of Erie, Pa., and the highest grade of wood-working machinery purchased of J. S. Graham & Co., of Rochester, N. Y., who have a reputation second to none for the latest and most improved machinery. The plant of this company includes a standard gauge railroad, two locomotives and twenty-five cars, steam driers with a capacity of 40,000 feet per day, a thoroughly equipped planing mill, complete in every detail; J. C. Anderson is president of the Empire Lumber Co., and J. W. Hightower is secretary. The general office of the company is in Chattanooga, Tenn.

## Philadelphia Trade Notes.

REPORTS from proprietors of shops and foundries indicate an increased healthy activity for 1888.

**BERTOLETTE & LUKENS** expect to have twenty machines in operation making wire

nails in a week. The machines are constructed from patents owned by the firm and have been put up by a corps of workmen especially skilled in that direction.

**PEDRICK & AYER** have about completed a new Universal milling machine which promises to engage favorable attention.

## Literary Notes.

AN examination of the Illustrated London News (American reprint) for October 22d, will show the English view of the trial yacht race, illustrations in connection with the State of Ireland; Our Homeless Poor in St. James's Park at Midday, the British Mission to Morocco, and sketches on the River Congo. A Sleeping Beauty represents a handsome tiger at rest, while Christening Sunday presens the infancy surrounded by admirers. The price of the number being only ten cents places it within the reach of all. Every newdealer has it. The office of publication is in the Potter Building, New York City.

THERE has been a very great change in the public taste for fiction within a short time. Until R. L. Stevenson and H. Rider Haggard entered the field with their imaginative stories, what is known as the analytical novel, held public attention, and the hero and heroine whose feelings were dissected took the place of those about whom a plot was woven. Now a new order of things has come about, the public having again tasted the delights of imaginative tales crave more, and the writer who weaves the most exciting plot is the one who finds the greatest favor. A gentleman, who hides his identity behind a simple "Q," has written a novel called "Dead Man's Rock," which Messrs. Cassell & Co., Limited, have nearly ready for publication, and which, it is predicted, will arouse the novel reading world to a pitch of excitement not even reached by the publication of "King Solomon's Mines."

"A LADY OF THE OLD SCHOOL" is the opening paper in the November number of The Atlantic Monthly. It is a most charming resume of Mrs. Susan Lesley's "Recollections" of her mother, Mrs. Lyman, of Northampton, and of the society which she gathered around her. Miss Jewett has a delightful sketch of a New England by-way called "The Landscape Chamber," a curious story, full of suggestion. Percival Lowell continues his series of articles, "The Soul of the Far East," by a paper on Oriental art, and John Fiske has another of his clear and readable studies in American history, this time devoted to an account of the adoption of the Constitution—a very timely topic. Mr. Philip Gilbert Hamerton, in the sixth paper of his "French and English" series, considers "Variety in the Indulgence of Sense as a Result of Individuality," and shows the fallacy of attributing certain defects often met with in a foreign country to all its inhabitants. A careful description of the "Red Cross" society and its work is given by Helen H. S. Thompson, and Bradford Torrey has a pleasant paper on "An Old Road." "Historic Points at Fort George Island" are depicted by S. G. W. Benjamin. A paper on "Girl Novelists of the Time," three poems of merit, and the serials by Mrs. Oliphant and Mr. Aldrich and by Mr. Crawford, close a number of more than usual worth. Houghton, Mifflin & Co., Boston.

"TUSKALOOSA, ALABAMA," is the title of a handsome pamphlet just received, the pages of which are given to a description of that attractive town and surrounding country. It sets forth in graphic language Tuskalooosa's history, present condition, &c., its natural resources, its facilities for the manufacture of iron and coke, cotton goods, brick, agricultural implements, wagons, furniture, woodenware, &c. Considerable space is devoted to the splendid agricultural region around Tuskalooosa, and its adaptability to stock raising, dairy farming, &c. There are engravings of the principal streets and buildings, and maps showing the geographical location of Tuskalooosa. The pamphlet is an extremely interesting one, and will be sent free on application to the Tuskalooosa Coal, Iron & Land Co.

**THE Decatur Land, Improvement & Farming Co.** have issued an attractive pamphlet entitled "Northern Alabama, and Decatur, Its New Industrial City. Resources and Attractions of 'the Chicago of the South.'" It is a clear, concise and conservative statement of facts bearing on the advantages, capabilities and progress of Decatur, and the resources of the country tributary thereto. The pamphlet is fully illustrated with engravings and maps. Persons who have any idea of moving South should procure a copy before deciding upon a location.

## Speed on Southern Railroads.

The Queen & Crescent Route, running trains from Cincinnati to New Orleans and Shreveport, La., and passing through Chattanooga, Birmingham, Tuscaloosa, Meridian, Jackson and Vicksburg, has, with its "Queen & Crescent Limited Express," reduced the time between Cincinnati and New Orleans (827 miles) to twenty-five and a half hours. This train leaves Cincinnati at 7:55 A. M., and arrives at New Orleans at 9:30 next morning.

## Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

TRAVELERS bound for Boston will do well to stop at the favorite American House in that city, where all the comforts of a quiet first-class hotel and all the luxuries of the season at table may be enjoyed at popular prices.

THE Palace Hotel, Cincinnati, Ohio, is said to enjoy the reputation of being the best \$2 hotel in America. 250 rooms; 140 front rooms. All conveniences and excellent cuisine.

THE St. Charles Hotel, of Lowell, Mass., is situated convenient to the depots and near the principal manufacturing interests of the city. It is fitted up with all the modern improvements and has all the comforts of home.

WHEN in Baltimore stop at the St. James Hotel, corner of Centre and Charles streets. Beautifully situated near the Washington Monument, accessible by street cars to all parts of the city, the St. James deserves its splendid reputation. Under the new management the house has been improved and put into first-class order. The Cafe is second to none. Rooms can be had either single or en suite.

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**Practical Electric Lighting.** By A. D. Holmes. Explaining the principles in plain language, and giving instructions as to the proper care of the apparatus. 183 pages with 45 illustrations. 8vo, cloth \$1. Catalogue and circulars free.

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**LIGHT LOCOMOTIVES**, Passenger, Freight, Tramway, Noiseless Street Motors and Mine Engines. Also Pole Road Locomotives, the only successful device of the kind made.

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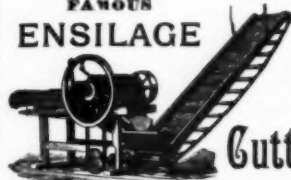


Although not so well known as its predecessors, it has at once sprung into popular favor, and the manufacturers are taxed to supply the demand. It has been on the market long enough to thoroughly test its wearing qualities, and the judgment of all who have used them is that it is the "ne plus ultra" of Type Writers.  
 Two different styles of type accompany each machine, and other styles can be instantly inserted. The manufacturers of the Hammond solicit business solely upon the ground of superior merit in their particular instrument. An examination, trial and test of the Hammond is solicited by all intending purchasers of Type Writers.  
**NOTED FOR** speed, absolutely perfect alignment, uniform impression, changeable type, is light and portable, writes on any width or length of paper, writes on postals, has from 800 to 1,500 less pieces than any other machine, and its work is always in sight. Send for circulars and specimens of its work to

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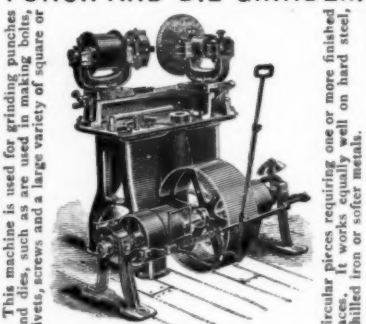
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This machine is used for grinding punches and dies, such as are used in making bolts, rivets, screws and a large variety of square or circular pieces requiring one or more finished faces. It works equally well on hard steel, chilled iron or softer metals.  
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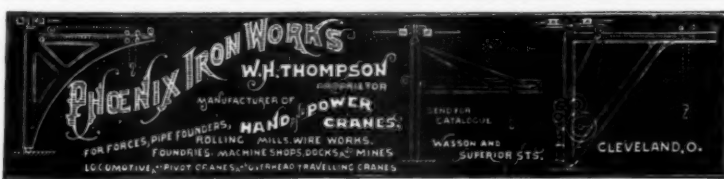
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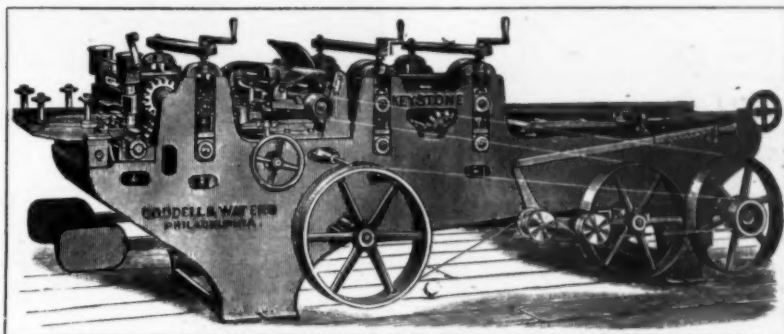
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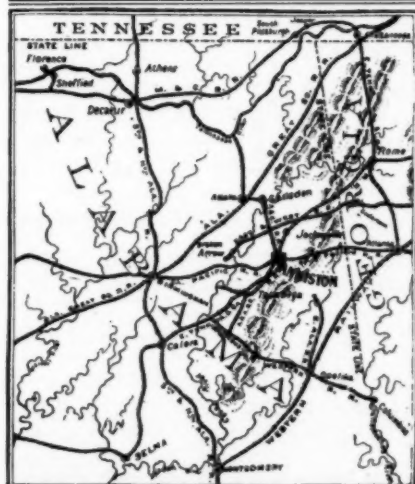
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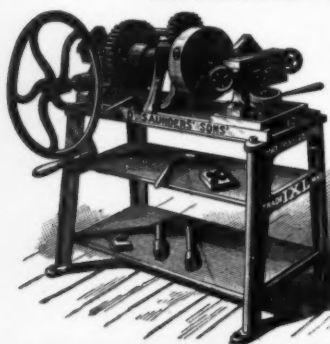
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Hol. Aug., Ives' Expansive, each 1/2, dis 25¢ to 5  
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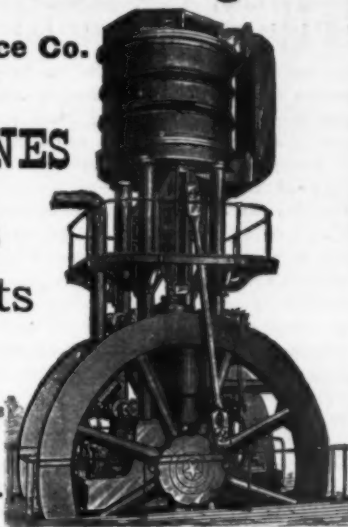
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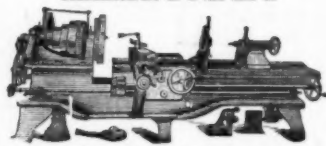
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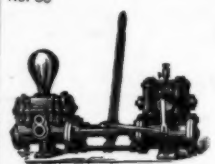
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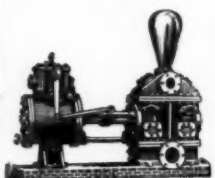
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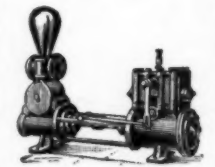
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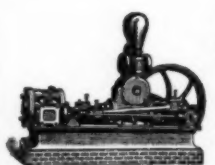
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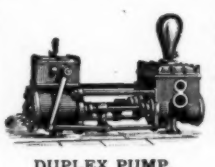
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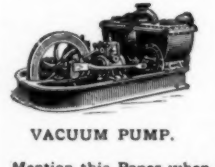
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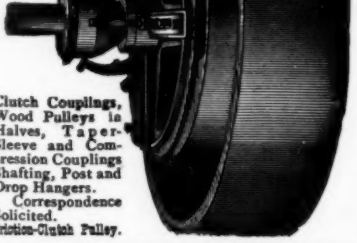


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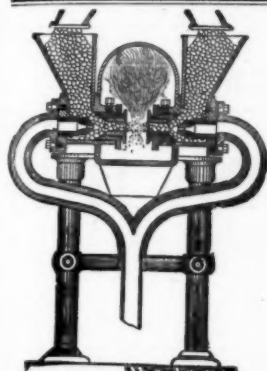
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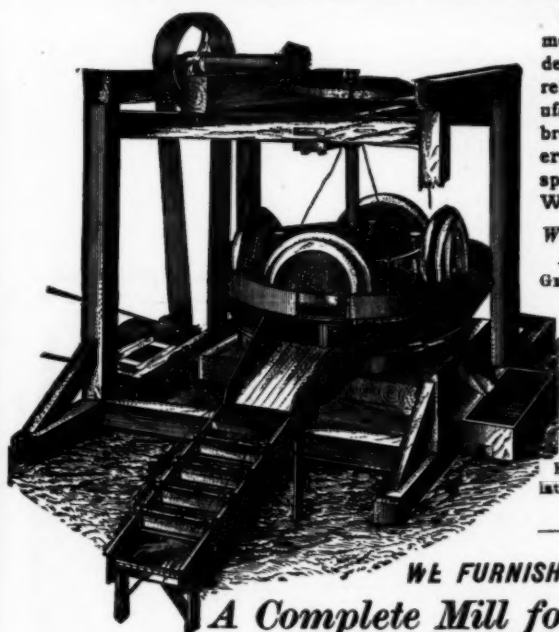


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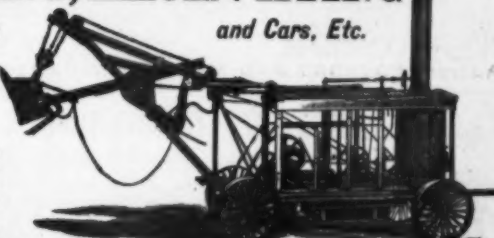
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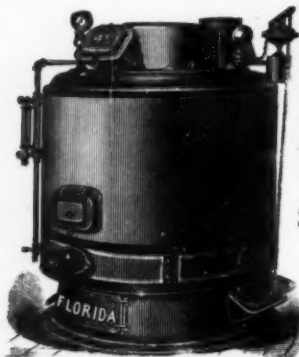
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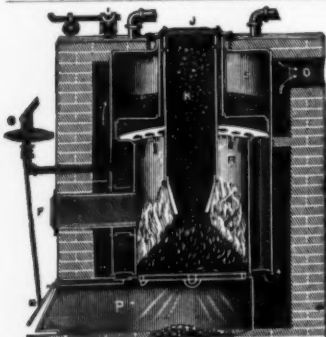
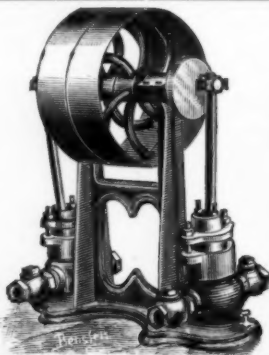
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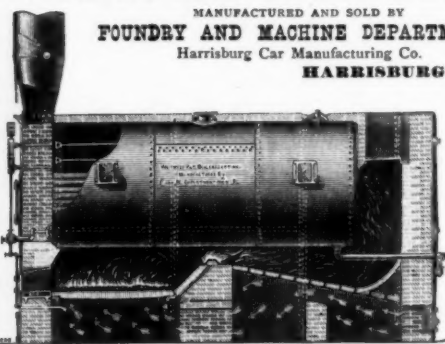
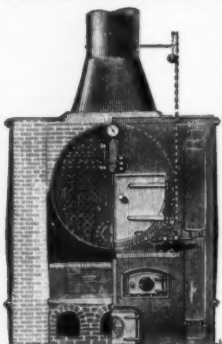
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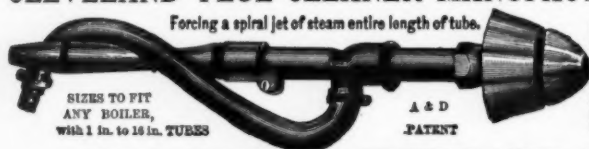
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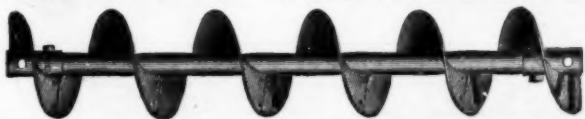
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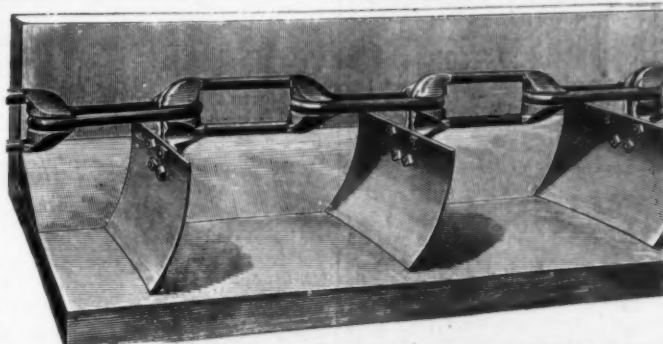
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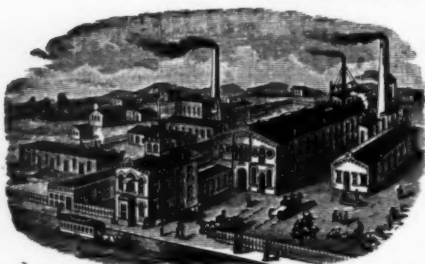


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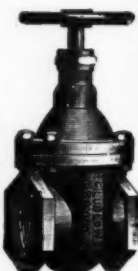
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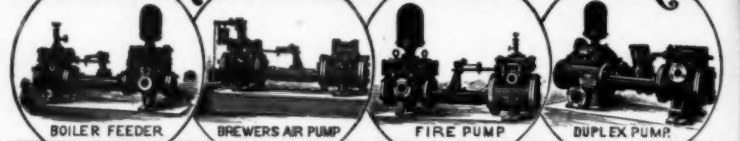
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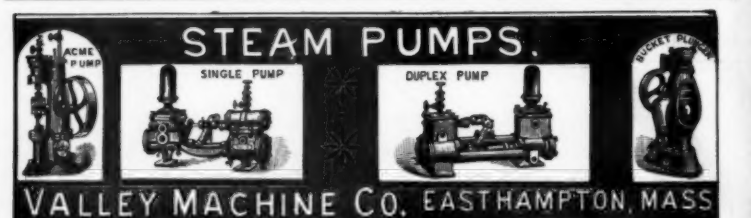
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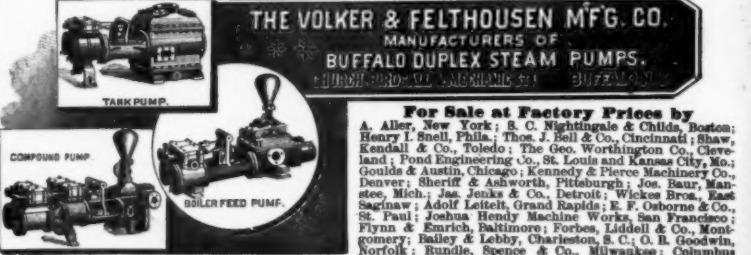
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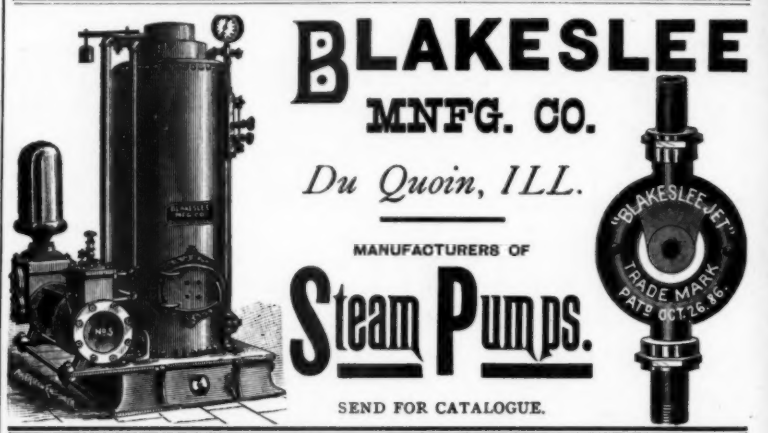


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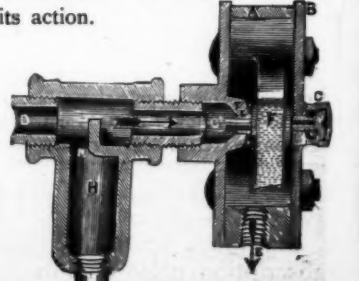
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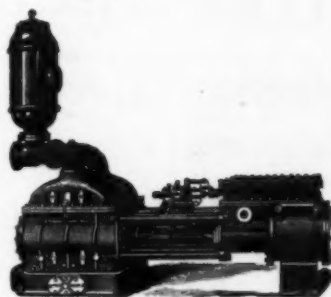
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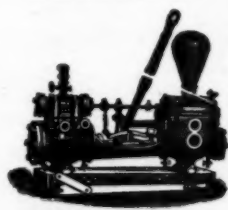
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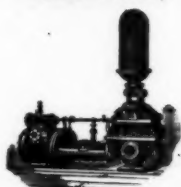
BOILER FEED PUMP.



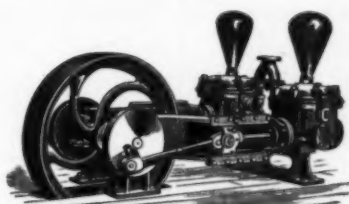
PRESSURE PUMP.



GEARED POWER PUMP.



FIRE PUMP.



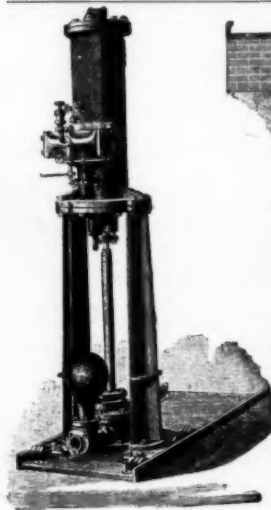
DUPLEX BELT PUMP.



AIR COMPRESSOR.

SEND FOR  
ILLUSTRATED  
CATALOGUE,  
WITH  
Price-Lists.

ESTIMATES  
FURNISHED  
—ON—  
APPLICATION.  
CORRESPONDENCE  
SOLICITED.

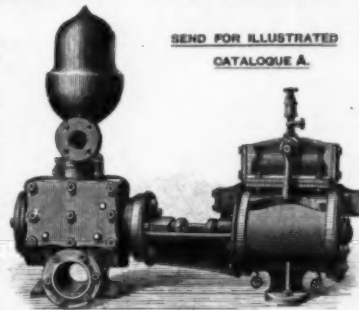


ARTESIAN WELL PUMPS.



## CAMERON STEAM PUMPS.

PUMPS FOR  
BOILER FEEDING  
MINES,  
REFINERIES,  
BREWRIES,  
TANNERIES,  
IRRIGATING,  
FIRE PURPOSES,  
RAILROADS &  
FILLING TANKS.  
CRANK & FLY WHEEL  
& VACUUM PUMPS.



SEND FOR ILLUSTRATED  
CATALOGUE A.

SIMPLE,  
COMPACT,  
DURABLE,  
EFFICIENT.  
—  
ADAPTED TO ALL  
PURPOSES.  
—  
NO OUTSIDE  
VALVE GEAR.



PISTON PATTERN.



PLUNGER PATTERN.

The A. S. Cameron Steam Pump Works,  
FOOT OF EAST 23D STREET.  
NEW YORK.

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## Worthington STEAM PUMPS

SEND FOR ILLUSTRATED CATALOGUE

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COMPLETE STEAM PUMP  
ONLY SEVEN DOLLARS  
DEMAND THIS PUMP  
OF YOUR DEALER  
OR WRITE  
TO US FOR PRICES  
VAN DUZEN'S PATENT  
**VAN DUZEN & TIFT.**  
SOLE MAKERS  
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### R. R. ROUSE PATENT ELECTRO-PLATED WELL POINT.



This is a NEW PATTERN, EXTRA STRONG; will stand rougher use than any in the market. A showing the openings before the wire gauze is soldered on. B after wire gauze is soldered on. C showing wire gauze and perforated brass soldered on. These Points are Electro-Plated, with Pure Block Tin inside and outside before receiving the coverings, there being no raw iron to corrode or rust or cause an unpleasant taste in the water. The Electric Process by which it is done is patented and exclusively owned and controlled by me for Driven Well Points in the United States. Warranted not to strip loose where soldered. Write for discounts and circular.

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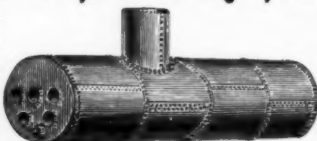
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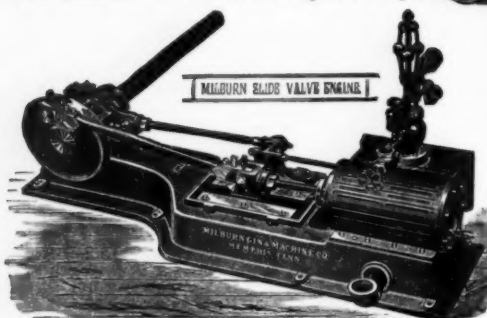
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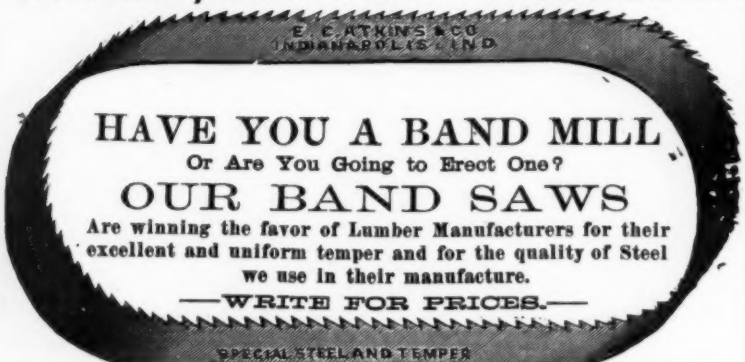
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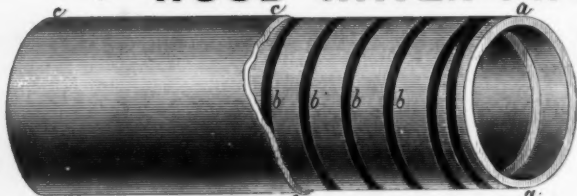
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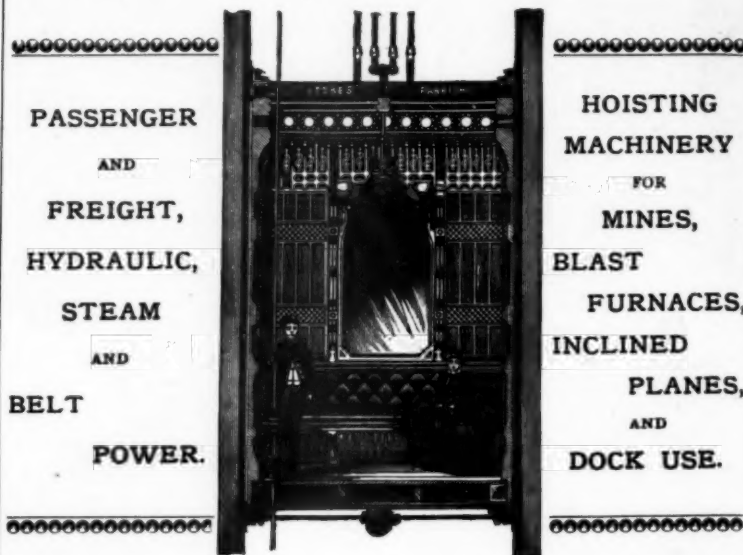
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